Wildlife Program – Bi-weekly Report

March 1 to March 15, 2019

HUNTER EDUCATION

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Nothing for this reporting period.

2) Providing Recreation Opportunities

Nothing for this reporting period.

3) Providing Conflict Prevention and Education

Master Hunter Permit Program: Region 5 Hunter Education Volunteer Coordinator Elliott worked with Conflict Specialist Jacobsen to get assistance in Klickitat County from master hunters. Due to low elevation snow levels, coyotes had moved down near the local cattle ranches. Depredation was causing landowners to take significant losses in their calving operations. A number of master hunters were deployed and the landowners were very thankful for the assistance.

Region 5 Hunter Education Volunteer Coordinator Elliott met with a local master hunter to brainstorm ideas he has for utilizing master hunters. He already regularly works with our conflict specialists on damage hunts and was one of the responders to the coyote depredation in Klickitat County. He feels strongly about the program and wants to offer help any way he can.

Region 6 Hunter Education Volunteer Coordinator Montgomery coordinated a volunteer project for WDFW personnel, where two disabled master hunter volunteers spent a week working on WDFW small game surveys.

4) Conserving Natural Landscapes

Tool Storage: Region 3 Hunter Education Volunteer Coordinator Garcia coordinated with two master hunters and Mountain to Sound Greenway Trust on a project to build tool storage at the Kittitas tool cache.

Master hunters proudly display their volunteer work, which will last a very long time

5) <u>Providing Education and Outreach</u>

Hunting Clinics and Mentored Hunts: Region 3 Hunter Education Volunteer Coordinator Garcia confirmed and communicated with 75 people signed up for spring turkey hunts. Garcia assigned mentors to 42 participants, and contacted additional mentors with the goal to have mentors assigned to all participants by April 15. Garcia also met with Biologist Westerman to discuss properties for mentored hunts. He reports that all the feedback from the landowners has been positive. In addition, he coordinated with National Wild Turkey Federation for the May 4-5 Women in the Outdoors/Jakes event.

Collaborating with Non-governmental Organizations: Region 4 Hunter Education Volunteer Coordinator Dazey met with members of Washington Waterfowl Association and the Twin Cities shotgun club to discuss a partnership opportunity for recent hunter education students. The two groups are looking to host recent hunter education graduates on a fun day of shooting trap at the range. Providing this opportunity for recent graduates of hunter education is hoped to continue to build an interest in shooting sports and provide a taste of the fun opportunities to hone their shotgun skills. They also will get to meet members of Washington Waterfowl Association and learn of further mentor opportunities to waterfowl hunting.

Region 4 Hunter Education Volunteer Coordinator Dazey coordinated with Washington Backcountry https://wabackcountry.com/, which is a non-government organization whose mission is to encourage and mentor new hunters who have not had the advantage of growing up in a hunting family. These late entry hunters often end up discouraged and frustrated as they try to learn the ropes without any guidance from experienced hunters. The founders of Washington Backcountry came to hunting as adults and feel passionate about passing on their knowledge and experiences to the new hunter. By becoming mentors, they also become ambassadors for the sport of hunting community.

Washington Backcountry founder Johnny Mack presents to the crowd

Loowit Chapter of the Rocky Mountain Elk Foundation (RMEF): Region 5 Hunter Education Volunteer Coordinator Elliott provided materials to Region 5 Master Hunter Advisory Group (MHAG) members George Dennis (MHAG Chair) and Keith Pfeifer who set up an informational table at the banquet on Saturday, March 9. The focus was on engaging with the RMEF membership to recruit WDFW volunteers and master hunters. The booth was visited by several RMEF members in attendance, one of which applied to become a volunteer hunter education instructor and others will apply. Six others signed WDFW volunteer application forms. In addition, George and Keith answered many general questions, especially regarding hoof disease. This was the second event. In February, Regional Coordinator Elliott and MHAG member Pfeifer set up a booth at the Vancouver RMEF Banquet with similar results.

Master Hunter Advisory Group members George Dennis and Keith Pfeifer

Career Day at Orting Middle School: Region 5 Hunter Education Coordinator Montgomery attended career day where he talked to students about the range of careers in WDFW.

National Hunting and Fishing Day: Region 6 Hunter Education Volunteer Coordinator Montgomery has been working on National Hunting and Fishing Day (NHFD), getting non-governmental organizations (NGOs) and sponsors committed. Some of the sponsors are longtime partners, and some are first year. One of the biggest sponsor's this year is Tacoma Sportsmen's Club. They have donated their clubhouse and ranges for this year's event. Montgomery presented a NHFD PowerPoint at the club's general membership meeting, explaining what NHFD was about and recruiting several volunteers. Some new sponsors/partners include Washington State Parks, Department of Natural Resources (DNR), Pierce Conservation District, South Puget Sound Salmon Enhancement, Get Hooked Foundation, Ducks Unlimited, and many others. Safari Club International has raised $2,000 toward their goal of a fishing rod and reel for every attendee. Returning partners will include Mule Deer Foundation with bringing their air rifle trailer and the ever-popular antler headgear for kids,

The Washington Hunter Education Instructor's Association has secured a grant from Friends of the NRA for a new Laser Shot system, which is a great tool for teaching youth and adults how to shoot and hunt, and can be used at many outreach and education events.

New Hunter Education Venues: Region 1 Hunter Education Coordinator Whorton is working to locate a new Hunter Education class venue in the greater Spokane area. The Spokane Trap Club is in the process of being closed due to encroachment of city, which will mean elimination of a teaching venue for one of the larger hunter education teams in the Spokane area.

Region 4 Hunter Education Volunteer Coordinator Dazey met with representatives of West Coast Armory in Bellevue to preview the venue for its suitability as a hunter education classroom and field course. Dazey was approached by the management of West Coast Armory and after the site visit, he not only found it to be suitable, but also recruited one of the range safety officers to apply to become a hunter education instructor. This will strengthen the tie to the range and also provide a facility in the Bellevue area where none have recently existed. Classes had been held at the West Coast Armory facility a number of years ago and we are glad to be given the opportunity to resume classes there.

Hunter Education Instructors: Region 1 Hunter Education Coordinator Whorton conducted a pre-service training session for hunter education instructor applicants, where six applicants were trained and moved on to the next step in instructor certification. Whorton also certified four new hunter education instructors in Regions 1 and 2.

Region 5 Hunter Education Volunteer Coordinator Elliott held a traditional hunter education class locally. Twenty-one students participated with an age range of nine to 53. Three instructor applicants who recently took their pre-service training attended and taught with the team to complete their certification requirements.

Hunter Education Coordinator Dazey conducted a pre-service training at the Boy Scout Camp Pigott in Region 4 where nine new instructors completed the certification process and were certified as hunter education instructors. The certification process involves the applicant first passing a background check and then attending a classroom session where agency policy and teaching tips and techniques are covered. Following the first session, the applicants are divided into teaching teams and then are grouped with experienced instructors. The applicants, with the help of the experienced mentors, are then required to teach an actual hunter education class. This practical exercise is followed by a debrief and, if the applicant has satisfactorily completed all the pre-service requirements, certification.

Students are taught to safely cross an obstacle either with a partner or if hunting alone

A young student learns how to safely carry his firearm when in the field

Instructor Teaching Team Evaluations: Hunter Education Coordinator Dazey traveled to Custer to visit the Hunter Education team that teaches there. Each coordinator is charged with visiting the teaching teams in their region. These regular visits insure that the department policies and the instruction syllabus and content are being followed. These regular visits also allow the coordinator to observe any new and innovative techniques that the team has developed to deliver the class content and then share these innovations with other teams. The team that teaches at the Custer gun range is filling a vital need for hunter education in Whatcom County and are much appreciated for the quality job they do.

Live fire is always the most popular part of the class, especially when conducted by a certified range safety officer

Student learning the different firearm actions

In addition to the Custer team visit, Hunter Education Coordinator Dazey also visited one of the two teams that teach at Black Diamond Gun Club (BDGC). The team at BDGC was teaching a traditional hunter education class where all of the instruction is provided in the class sessions usually lasting a total of 15 to 18 hours of instruction spread over several sessions. Classes use a set of inert firearms or orange guns, to safely learn each skill prior to handling live firearms.

Students learning to remove firearms safely from a vehicle

Selecting the correct ammunition for the firearm, loading and unloading safely, and learning to work each type of action

Hunter Education Instructor Recognition. Hunter Education Coordinator Dazey completed the nomination for the 2018 Terry Hoffer Memorial Firearm Safety Award recipient Bob Palmer to the International Hunter Education Association (IHEA) as the instructor of the year for 2018. Washington state has previously had three instructors presented with this prestigious award; most recently Steve Mills (Region 5) and Cathy Lynch (Region 4). It is a great honor for Washington to be represented in the list of top instructors. It shows the quality of the Hunter Education Program in Washington and the quality of our instructors. It is this quality level of instruction that will ensure our hunting heritage is passed on to the next generation of safe, legal, and ethical hunters.

6) Conducting Business Operations and Policy

Master Hunter Advisory Group Selection: Hunter Education Division Manager Whipple and Hunter Education Division Specialist Thorson met with the Master Hunter Advisory Group (MHAG) selection subcommittee. During the meeting, recommendations for the appointment of six members to the MHAG was discussed. The recommendations were presented to WDFW Director Susewind for appointment to the group. Hunter Education Division Manager Whipple also briefed the director on the Master Hunter Permit Program, its membership, and the current budget situation.

7) Other

Nothing for this reporting period.

DIVERSITY DIVISION

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

White-nose Syndrome/Bat Response: Biologist Tobin participated in the national white-nose syndrome (WNS) conference that included state, federal, provincial, and tribal members of the WNS national stakeholder committee and researchers. Topics discussed included current research related to bat conservation and treatment for WNS, accomplishments of the national WNS response team and states and provinces strategies to manage WNS.

Oregon Spotted Frog Inventory and Monitoring in Washington: The Oregon spotted frog-breeding season is underway. Biologist Hallock determined that the first egg masses at the site she monitors in Thurston County were laid on Mar. 3. This is typically the first site where the Oregon spotted frogs start breeding range-wide. It was a slow start to the breeding season due to snow and cold temperatures in February. These cold temperatures continued into March resulting in few egg masses being laid until almost mid-March. Sunny days with air temperatures reaching 50 degrees Fahrenheit finally got breeding going with 80 egg masses found on Mar. 12. We expect two to three times more egg masses to be laid at this site before the breeding season is over.

Each female lays a single egg mass, so the total number of egg masses is used to monitor the size of the female population at each site in Washington. This year, WDFW biologists will focus on finding new sites rather than monitoring known sites except for sites that have long-term datasets or where habitat restoration is underway. Oregon spotted frogs are listed as federally threatened and state endangered. Populations in Washington occur in Whatcom, Skagit, Thurston, Skamania, and Klickitat counties.

Oregon Spotted Frog egg masses

Discussion with Researchers about the Motus Wildlife Tracking System: Natural Resource Scientist Buchanan participated in a conference call to discuss options for establishing a Motus tower in Washington. The Motus Wildlife Tracking System is a network of automated telemetry stations that record signals given by marked birds (or bats) that move through the network. A well-established network of towers in northeastern North America has demonstrated the tremendous utility of the Motus system to passively record the presence of marked animals as they move through the detection range of one or more receiver stations. The Motus system has not been established in western North America. Researchers in Canada hope to establish a temporary Motus station at Grays Harbor that can be used to gather information about migration and hopefully to serve as the first of many stations in this part of the country. Joe recommended a location that may be used in this first application of the Motus system in Washington.

Species Status Reviews: Biologist Stinson completed revisions to the to the tufted puffin status review and recovery plan, with good suggestions from Fish Program (Lowry and Wargo), and intergovernmental (Culver); this document is a cooperative effort with Science Division (Research Scientist Pearson), the SeaDoc Society (Hanson), and University of Puget Sound (Hodum). The public draft periodic status report for the Oregon silverspot butterfly (federally threatened) was also completed. The drafts were made available on the web site by Public Affairs (Bartlett and Burrows), and a press release issued announcing a 90-day comment period. Biologist Stinson began revisions of a work draft of a status report of the Oregon vesper sparrow, another declining west-side prairie species, recently petitioned for Endangered Species Act (ESA) listing by a conservation organization.

Sage-grouse and Sharp-tailed Grouse: Biologist Stinson sent out a draft grouse translocation guidelines document to conservation partners for review. Stinson continued planning for a sharp-tailed grouse capture effort this spring with Biologist Sato, Research Scientist Schroeder, and Region 2 Biologists Fitkin and Heinlen.

Species Surveys: Wildlife Biologist Hayes is coordinating with regional biologists in planning for surveys to identify new colonies of Washington ground squirrel and Townsend ground squirrel, both candidate species.

Short-eared Owl surveys: With assistance from Wildlife Biologist Fidorra, Natural Resource Scientist Buchanan addressed questions posed by volunteers prior to implementation of the 2019 survey for short-eared owls. Surveys will occur across eight western states, including Washington, and the surveys will be conducted at up to 50 randomly selected grid cells of 10 by 10 kilometers in each state. Over 600 volunteers across western North America participated in the survey in 2018. All survey areas in Washington are east of the Cascades. Buchanan is the state coordinator for this project and Fidorra stepped in to fill this role for three weeks in his absence.

Professional Development: Biologist Hallock attended the Northwest Partners in Amphibian and Reptile Conservation (PARC) symposium at the 2019 Joint Annual Meeting of the Washington Chapter of the Wildlife Society, The Society for Northwestern Vertebrate Biology and Northwest Partners in Amphibian and Reptile Conservation. The symposium featured presentations about the use of environmental DNA (eDNA) in herpetology, herpetological diseases, and a mini-symposium featuring presentations about Western pond turtles. The day also included the Northwest PARC organization and business forum. PARC is an inclusive partnership dedicated to the conservation of reptiles and amphibians and their habitat. Membership comes from all walks of life. Biologist Hallock serves on the steering committee.

Presentations Given at Joint Meeting of TWS, PARC and SNVB: Several staff members from Wildlife Diversity Division attended this joint conference, held at the Great Wolf Lodge in Grand Mound, Washington. Abstracts of staff oral presentations and posters are listed below.

Results of the 2018 Western Asio flammeus Landscape Study (WAfLS) in the Western United States. (*Joseph B. Buchanan*) In North America, the short-eared owl (*Asio flammeus*) inhabits grasslands and similar open cover types in Alaska, Canada, and the northern coterminous United States. A recently published status assessment suggested a substantial decline in its range-wide abundance, but acknowledged uncertainty because breeding bird survey data are likely inadequate to assess trends in an owl species that breeds in early spring. In addition, the species exhibits dramatic temporal and spatial variability in distribution and abundance, which makes assessing population status difficult. To better assess the status of the species and to address aspects of habitat use, we developed a regional project that used volunteer naturalists to collect survey data across eight western states. In 2018, the first year of the range-wide survey effort, 622 volunteers conducted road-based surveys on 368 transects in our study area of about 217 million acres in California, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming. Short-eared owls were detected on 57 transects. Preliminary results indicated that probability of detection declined with increasing Julian date, increasing wind speed, and greater percentage of area grazed. The probability of presence increased with an increasing amount of stubble agriculture and the proportion of the survey in cropland. We generated a map of the predicted occurrence of short-eared owls using Maximum Entropy modeling that incorporated 28 climatic, geographic, and land cover attributes. Upon completion, the results of this three-year project should provide a greater spatial and temporal understanding of distribution, habitat use, and abundance of short-eared owls.

Shell Disease in Washington's Western Pond Turtles—A Quantitative Assessment Based on Computed Tomography. (Katherine Haman, *Lisa Hallock*, Lameace Kalisz, Ilai Keren) Shell disease in Washington's western pond turtles (*Actinemys marmorata*) has the potential to limit the recovery of this state endangered species. Though the analysis of the shell disease is incomplete at this time, there is an association with a fungal pathogen closely related to the pathogen that causes snake fungal disease. The overall impact of this disease on the recovery and conservation of western pond turtles in Washington remains under investigation. To monitor the prevalence, disease progression, treatment success, and overall impacts of the disease on reproductive success of affected individuals, we developed a method for disease assessment based on computed tomography scans. This assessment allows us to quantify both the severity and extent of shell disease in individual turtles as well as clearly identify the prevalence of this disease in Washington populations of western pond turtles. For this talk, we will focus on the assessment protocol and preliminary results from turtles that have had repeat CT scans over several years. We will highlight the usefulness of the assessment in monitoring disease progression in turtles that have been treated compared to those which have not. We will also discuss the use of this assessment to investigate the impacts of shell disease on reproductive success and thus its potential impacts on population recovery. In conclusion, we will review what is known to date regarding shell disease in western pond turtles in Washington and mitigation efforts currently underway.

Lynx Conservation in Washington: Combatting the Effects of Fire, Climate and a Small, Isolated Population. (*Jeffrey Lewis*, Dave Werntz, Gary Bell, Scott Fitkin, Scott Fisher, and Karen Hodges) Lynx (*Lynx canadensis*) once occupied the high-elevation spruce, fir, and pine forests of northern and northeastern Washington in Okanogan, Ferry, Stevens, and Pend Oreille counties. Despite protection from trapping since 1991, and state (1993) and federal (2000) listings as a threatened species, the conservation status of the lynx has only worsened. Since the lynx was listed, its range has contracted to the west and it is now restricted to western Okanogan County. The causes for this contraction are poorly understood. Within the last 20 years, an unprecedented number of large fires have occurred within western Okanogan County. Currently, lynx occupy four localized areas within western Okanogan County and lynx persistence in these areas is threatened by continued habitat loss and fragmentation via wildfires, as well as limited immigration from British Columbia. In the summer of 2018, fires occurred within each of these four occupied areas. A number of lynx conservation strategies have been proposed and implemented in the last five years, but large fire events outpace these protections and conservation actions and are not expected to become less severe in the future. We propose ongoing and heightened protections of remaining lynx habitats and prioritization of those known to be occupied. We also promote ongoing occupancy surveys to determine where lynx currently occur in this fast-changing landscape, to target conservation actions where they can be most effective. We provide details on these approaches and challenges as we consider what recent events could mean for lynx persistence in Washington.

The Cascade Fisher Reintroduction Project in Washington: Progress in the South Cascades and Launching a New Reintroduction in the North Cascades. **(***Jeffrey Lewis*, Tara Chestnut, Jason Ransom, and David Werntz) Fishers (*Pekania pennanti*) are a mid-sized member of the weasel family that once occurred in the coniferous forests of Washington but were extirpated in the early and mid-1900s as a result of over-trapping, habitat loss, and predator eradication programs. To restore fishers in Washington, we reintroduced 90 fishers to Olympic National Park (2008-2010), 73 fishers to the South Cascades (2015-2018), and we recently initiated (in December 2018) a fisher reintroduction to the North Cascades Ecosystem. Our recent findings in the South Cascades indicated that the large majority of released fishers (all had radio-transmitters)

remained within the reintroduction area, less than 50 percent of females established home ranges in the first year following release, annual survival rates for fishers ranged from moderate to high, and females are reproducing. While these are initial and preliminary findings, they are positive and consistent with successful reintroductions. We will also share details about numerous, substantial changes in our reintroduction strategies (i.e., new source population, partners, operations, and research opportunities) that are part of the reintroduction now underway in the North Cascades, where we plan to release 80 or more fishers between 2018 and 2020.

Engaging the Public to Promote Bat Conservation in Washington. **(**Lori Salzer, *Abigail Tobin*, Rachel Blomker, *Joe Buchanan*, and Treg Christopher) In March 2016, white-nose syndrome (WNS) was documented in Washington for the first time. This disease has devastated bat populations in the eastern United States and many western bat species are likely vulnerable and may be similarly affected. Other states have used data from over-wintering sites to assess bat populations and the impact of WNS. In Washington, over-wintering strategies for most bat species are not understood and the locations of their hibernacula are poorly known. More information is available on maternity sites in Washington, but comprehensive surveys and long-term monitoring have not been conducted. The challenge to assess impacts of WNS without baseline information for summer and winter roosts, clarified that gathering multi-species, statewide bat roost information was an immediate priority. Because many of our bats use human-made structures for roosting, we focused efforts to educate and engage the public as a means to gather information on bats. An outreach plan included use of social media, community outreach activities, and our web portal to report information on groups of bats and sick or dead bats. Social media (Facebook and Instagram), reached 166,807 accounts. The public provided over 562 reports; 164 of those were groups of bats, which led to documentation of 49 new maternity colonies. From this effort, we have learned that there is an abundance of public knowledge available to us about bats. We will continue to broaden our outreach strategies to better inform our knowledge of bat roosts in Washington.

Overview of Washington Department of Fish and Wildlife White-nose Syndrome Response Plan. (*Abigail Tobin*, Lori Salzer, Joseph Buchanan) In March 2016, the first detection of white-nose syndrome (WNS) west of the continental divide occurred in King County, Washington. Washington Department of Fish and Wildlife, with support from partners, implemented a comprehensive WNS response plan after the initial detection, including passive and active surveillance, population monitoring and public outreach. We implemented passive and active surveillance to determine the distribution of WNS and species susceptibility. Since 2017, we have collected over 200 samples from bats through passive surveillance efforts and collected samples at 57 bat roosts through active surveillance efforts. We now have 34 detections of WNS and the fungus that causes WNS, *Pseudogymnoascus destructans*, in Washington. We implemented several projects to understand the natural history of Washington bat species so we can effectively monitor populations and the disease. These projects included: 1) assessments at 50 newly reported bat colonies, 2) emergence counts at 69 maternity colonies, 3) winter acoustic monitoring near the initial WNS detection, and 4) talus slope surveys near the initial WNS detection. We developed and implemented an outreach plan for bats and WNS, which included: 1) a social media campaign, 2) developing new outreach products and 3) attending community events to convey key messages about bat conservation and WNS. We have made progress since 2016 to understand the effects of WNS on Washington's bat populations; however, there is still a need to collect information about Washington's bat populations to support development of an informed disease management plan.

White-nose Syndrome/Bat Surveillance: Biologist Tobin met with U.S. Forest Service biologists at Boulder Cave recreation area to collect samples from bats and their roosting environment for white-nose syndrome testing. They were able to collect samples from three bat species: Townsend's big-eared bat, silver-haired bat, and either California myotis or western small-footed myotis (those two species are difficult to distinguish visually). This sampling is part of a larger statewide effort to track the spread of white-nose syndrome and to assess the health of bat populations.

Fish and Wildlife Conservation in 2018 Farm Bill: Farm Bill Coordinator Kuttel developed comments on implementation of fish and wildlife conservation in the 2018 Farm Bill and submitted to the Association of Fish and Wildlife Agencies (AFWA) for inclusion in AFWA comments to the United States Department of Agriculture (USDA). Kuttel coordinated with Wildlife Program regional program managers and senior managers to write a similar letter directly from WDFW to USDA.

LANDS DIVISION

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Nothing for this reporting period.

2) Providing Recreation Opportunities

Water Access Site Manager Belson reached two targets for water access planning. First is launching the Region 4 and Region 6 review of department fishing and boating access (land and facilities) in the management planning area of the South Puget Sound and Scatter Creek wildlife areas. Second is completing the initial evaluation of fishing and boating access in the management planning area of the Skagit Wildlife Area. These assessments include 97 managed and unmanaged sites in Thurston, Pierce, Mason, Kitsap, and extreme southeastern Grays Harbor counties and 98 such sites in Skagit, northern Snohomish, Island, and San Juan counties. This information is provided to each wildlife area planning team for the purpose of evaluating recreational opportunities, department liabilities, management efficiencies, and other matters relating to these department lands.

3) Providing Conflict Prevention and Education

The Lands Division has been working with Game Division, the wolf policy lead, and a Strike Team of relevant staff members to develop a short-and long-term approach to reducing and addressing wolf-livestock conflicts on WDFW lands. In the short-term, this will include an approach to be integrated into renewed grazing leases as well as existing grazing leases (on a voluntary basis). In the long-term, we will continue to work with stakeholders to develop clear guidance and process on how which proactive and reactive measures to utilize on department

lands. This guidance and process will be included in the grazing program review that is currently in process.

4) <u>Conserving Natural Landscapes</u>

Conservation Easement Purchase: A conservation easement has been purchased in Thurston County to protect 72 acres of Mazama pocket gopher habitat.

Coordinated Weed Management Area Workshop: Vegetation Ecologist Merg spoke at an all-day workshop for landowners sponsored by the local Coordinated Weed Management Area. Merg's talk was titled, "Beyond the Infestation: How Wildlife Habitat helps with Weed Control."

Teanaway Community Forest: Range Ecologist Burnham delivered an update on grazing infrastructure planning to the forest advisory committee's quarterly meeting, and fielded related questions. He also inspected strategic log placement conducted to control livestock passage along Dickey Creek.

Annual Firefighter Refresher Training and Pack Test: WDFW's prescribed fire team provided annual fire fighter refreshers courses starting this week for WDFW employees. Personnel from State Parks were also invited. WDFW participants came from a range of programs including wildlife area personnel and other Lands Division staff members, biologists, and folks from Enforcement and Fish programs. Two sessions were taught with 35 participants. The annual firefighter refresher is a requirement to maintain current qualifications and a chance to receive new information. The refresher also includes a physical fitness test requiring folks to take a timed walking test with a weighted vest.

The 2019 Spring Prescribe Burn Season: Prescribed fire team staff members are planning units for Rx fire implementation. Units on the following wildlife areas are planned: Sinlahekin, Sherman Creek, Rustlers Gulch, Colockum, L.T. Murray, Oak Creek, and Grouse Flats. Over 3000 acres have been identified to burn this season. Weather will be the biggest driver on how much will be accomplished.

Rustlers Gulch Wildlife Area Forest Thinning: Forester Ashiglar received the final pre-commercial thinning/fuels reduction layout maps and shape files from the layout contractor Northwest Management. One hundred fifty acres will be added to the total thinning acres as soon as the snow melts a little. Units will be thinned to reduce fuels and fuel ladders in un-even aged forests, and promote healthy tree growth and suitable species composition for young forests. The area around the power line along Horseshoe Lake Road will also be thinned.

This new thinning unit on the Rustlers Gulch Wildlife Area would have small trees removed around the dripline of larger trees, such as the pine on the right side of the photo

Ramsey Forest Restoration Thinning Project: Forester Mize analyzed three harvester bid proposals that were received for this project on Mar. 1. Overall, the apparent successful bidder was Will Logging and Construction from Loomis, Washington. Will Logging's total contract bid price will be approximately $650,000. In addition, Forester Mize coordinated a log sort auction at the Region 2 office in Ephrata on March 12. Different "sorts," or groupings, of logs were sold to different mills. Overall, the department sold all the log sorts for over the minimum bids, and as a result, the project's economic outlook is looking vastly improved. The gross revenue from the sale of logs is projected to exceed $700,000 and the project should pay for itself plus provide a little revenue to help set up future work. Work should begin on the project in May.

5) <u>Providing Education and Outreach</u>

Lands Showcase Marketing and Communications Report: The Lands Showcase final report on the research and marketing plan for WDFW lands was submitted by Northwest Research Group and C+C on Feb. 28.

New Communications Specialist: The Lands Division has hired Les Tobias as our lands communications specialist through the end of the biennium. He comes from Public Affairs and has been focusing on video production, website, and social media. Les will be working on developing templates and outreach communications to implement the Lands Showcase message playbook work on the two to four lands units that will be highlighted in the next several months.

The Scatter Creek Wildlife Area Public Scoping Meeting: The public scoping meeting was held on March 4 at Swede Hall in Rochester. The meeting kicks off the public scoping process for writing the new wildlife area management plan. The meeting had been rescheduled from the Feb. 13 date due to severe weather. Larry Phillips and Brian Calkins welcomed everyone and introduced staff members. Presentations included Lauri Vigue providing an overview of the wildlife area planning process and wildlife area highlights by Darric Lowery. We had 45 members of the public present including representatives from several dog training organizations (e.g. Irish Settler Club of Seattle, Oregon Brittany Club, Washington Brittany Club), Washington Waterfowl Association, Thurston County Equine Outreach, Backcountry Horseman, and the

audience included neighbors and citizen science members. Thurston County Commissioner Tye Menser attended, as well as eight members of the Scatter Creek Wildlife Area Advisory Committee. The meeting was held in an open house format with comments collected from the public.

6) Conducting Business Operations and Policy

U.S. Forest Service Good Neighbor Authority (GNA): The U.S. Forest Service (USFS) Good Neighbor Authority (GNA) agreement finalized on March 14. This is an umbrella agreement that creates the structure for place-based contracts by which the USFS could pay WDFW staff members for accomplishing work on USFS lands. For the purposes of the Lands Division, this may include prescribed burn or other forest restoration work that our staff members could accomplish that would have larger landscape effects and make the work on our lands ultimately more sustainable. Other eligible work includes fish and wildlife monitoring, forest, rangeland or watershed restoration, road reconstruction, and repair or restoration (including fish passage). Supplemental Project Agreements (SPAs) are the instrument for specific allowable services.

Real Estate Services welcomes a new lands agent in Region 4 as of Mar. 18. Ms. Edie Thomas joins Real Estate Services bringing several years of real property management and transactions experience working with The Nature Conservancy in Rhode Island.

2018/2019 Lands 20/20 Process: The 2018/2019 Lands 20/20 process for land acquisitions has been completed with Director's approval to proceed with future funding requests for nine properties in Regions 2 and 6.

7) Other

Nothing for this reporting period.

SCIENCE DIVISION

1) Managing Wildlife Populations

Predator-Prey Project – Ungulate Research: Research Scientist DeVivo, Region 1 staff members, and University of Washington (UW) capture crews continued white-tailed deer capture work. As of March 15, they have deployed 58 collars on adult does. Additional young-of-the-year deer have been captured and collared. Capture teams will continue to deploy collars thru next week. The weather has significantly changed with warmer days slowing, but not halting capture success. Due to weather conditions and other tasks that need attention prior to April 1, capture work will conclude Friday, March 22.

Predator-Prey Project – Cougar Research: Research Scientist Kertson continued capture efforts in Game Management Units (GMUs) 117 and 121 in support of cougar research as part of the Predator-Prey Project. The season is quickly coming to end, but he and his team managed to successfully recapture an adult female and swap out her bad collar for a new one that is working correctly. They also captured a 12 to 14 month old male cougar during this session. This makes cougar number 50 that has been captured and marked in the northeast study area for project. To date, 29 cougars have been outfitted with a GPS radio collar. With spring just around the corner, the winter 2018-2019 capture season will conclude later this month.

Lynx Decision Support Package: Biologist Blatz is finalizing development of map and tabular data products for delivery to U.S. Fish and Wildlife Service (USFWS) in response to the proposed federal delisting of Canada lynx. Analyses focus on quantifying and mapping significant habitat loss due to the increasing extent and severity of wildfires in key lynx habitat in Washington and British Columbia over the past 28 years. Work has been performed in coordination with Biologist Lewis who is the species lead in the Diversity Division. Draft products will be sent out for peer review in the coming week and the package will be delivered to the USFWS in a couple of weeks.

Western Pond Turtle Recovery: Veterinarian Haman met with partners at the Woodland Park Zoo to discuss recovery and conservation efforts for the western pond turtle. Though recovery of this state endangered species has been successful over the past two decades, recent discovery of a disease that affects the shells of western pond turtles in Washington may be limiting this recovery. Ongoing research using CT scans to investigate the extent and severity of the shell disease indicates that the prevalence is over 85 percent. In light of this, WDFW led research collaborations with partners such as the Woodland Park Zoo, Oregon Zoo, Shedd Aquarium, University of Washington, and University of Illinois are invaluable.

Winter Mule Deer Mortality: Veterinarian Mansfield and Wildlife Health Technician Cole have been receiving an increase in reports of dead mule deer in eastern Washington. To date, necropsies and laboratory testing indicate that the deer are in a state of chronic negative energy balance, likely a result of prolonged winter weather and deep snow pack. At least one deer had a severe stomach ulcer, which usually indicates that the deer had been eating inappropriate feed such as corn, grain, or wheat. A deer's digestive system cannot handle the sudden addition of these feeds to their diet in the winter. When eaten, they ferment in the stomach, producing large amounts of acid, which cause ulcers and enter the bloodstream, usually resulting in death.

Wildlife Health Monitoring: Wildlife Health Technician Cole managed biological samples collected from winter research captures of mule deer, white-tailed deer, bighorn sheep, and elk. These archived samples are invaluable for conducting retrospective health evaluations and for sharing with collaborators conducting various wildlife health investigations.

Veterinarian Haman coordinated with Biologist Fidorra on a large (over 100) American robin mortality event in the Tri-cities area. Initial necropsy and laboratory results revealed emaciation in all submitted birds. Further diagnostic testing is pending.

Veterinarian Haman began the initial planning, with Research Scientist Pearson, for a health assessment on rhinoceros auklets. This research is funded by a small grant received from UC Davis's Oiled Wildlife Care Network. WDFW will conduct this work later this spring/summer.

Veterinarian Haman participated in a monthly call with Partners for Amphibian and Reptile Conservation Disease Task Team (http://parcplace.org/resources/parc-disease-task-team/). This group recently wrote a manuscript for peer-review that highlights specific biosecurity and decontamination concerns when conducting fieldwork at sites that are of high risk for pathogen exposure and transmission between wildlife populations. Veterinarian Haman is the lead author on this paper, which is currently in review at Herpetological Review.

Veterinarian Mansfield participated in a call with Olympic National Park and Northwest Trek staff members to continue planning for mountain goat captures and translocations scheduled for this summer.

Big Game Harvest Estimates: After completing the preliminary analysis of harvest data, Biometrician Keren and IT Specialist Whelan provided draft information to regional biologists for quality control review. Whelan and Keren responded to several inquiries received from staff members. The feedback indicated the results were being closely scrutinized. The redesigned HEIDI framework (Harvest Estimation from Irregular Data Inputs, ca. 2016) continues to show our analyses are robust, data integrity is strong, and overall we have high confidence in the results. The codebase is looking good after working with Licensing and JMT on several WILD system nuances, making improvements, and undergoing several rounds of quality assurance. When completed, we feel the suite of products derived from our harvest estimates will give decision-makers and the public the most accurate picture possible of Washington's big game harvest in 2018.

2) Providing Recreation Opportunities

Nothing for this reporting period.

3) Providing Conflict Prevention and Education

Problem Moose Re-sightings: Wildlife Health Technician Cole followed up with several members of the public that called to report sightings of ear tagged moose. Most of these are moose that have been darted and removed from suburban areas in and around Spokane. People are often curious to know the history of the moose they had seen. Many send in pictures caught on game cams etc. Cole records these re-sightings into our moose database and provides a brief history to callers of why the moose have tags. Citizens seem to appreciate the information and learning about our work with the moose, and information on where and when they are observed informs our understanding of outcomes of relocating problem moose.

Habituated Wildlife: Veterinarian Mansfield traveled to Yakima to conduct a physical exam and testing on a tame elk that will be transferred to the Woodland Park Zoo.

Staff Member Training: Veterinarian Mansfield and Wildlife Health Technician Cole began to make arrangements for annual agency chemical immobilization training later this spring, which staff members must complete before they can legally possess or use drugs to capture wildlife.

4) Conserving Natural Landscapes

Nothing for this reporting period.

5) Providing Education and Outreach

Citizen Scientist Training: Research Scientist Vanderhaegen trained 14 Audubon volunteers working on the cooperative sagebrush songbird survey on how to enter bird observations using ArcGIS Online and the Survey123 application. Audubon volunteers are conducting bird surveys primarily on public lands, but also on private lands where the landowner has granted permission. Whereas project volunteers enter data collected on public lands into the online site eBird, a global database used by birders and scientists to store bird observation records, survey observations collected on private lands will be stored in a secure WDFW database to provide a measure of privacy to the landowners who granted access to their lands.

Wildlife Health Education: Veterinarian Mansfield presented a webinar on treponeme-associated hoof disease (TAHD) of elk as a contribution to the Animal Determinants of Emerging Disease (ADED) seminar series, hosted by the Centre for Coastal Health in Nanaimo, British Columbia.

Wildlife Health Outreach: Veterinarian Mansfield provided veterinary input into agency outreach material on the Chelan Butte bighorn sheep capture, winter-feeding of wildlife, and TAHD. In addition, she answered questions from an outdoors reporter who is doing a story on TAHD.

6) Conducting Business Operations and Policy

Nothing for this reporting period.

7) Other

"Data-Driven" Website Content: IT Specialist Trewella continues to participate on an interdisciplinary technical team comprised of personnel from Public Affairs, Information Technology Services, and Lands Division. This team has prototyped a robust and integrated framework of GIS, data management and web technologies for effectively delivering WDFW web-content directly from authoritative databases, which are managed by subject matter and business experts within Wildlife Program. This new framework will be deployed at the end of March and over time will continue to be refined and expanded to include more data-driven content and interactive mapping capability to showcase the recreation and conservation opportunities on WDFW managed lands. This technological framework modernizes and streamlines internal content management and improves content delivery.

ESRI GIS Developer Summit and Workshops: IT Specialists Wiersma, Trewella, Simper, and Whelan attended the annual GIS Developer Summit, sponsored by ESRI. This weeklong workshop was comprised of hands-on training in extending and customizing mobile and web-based GIS applications for data collection, analysis, visualization and reporting. New and emerging GIS technologies were presented at the conference related to the ArcGIS Pro, ArcGIS Online, Portal, Insights, Survey123, Explorer, and Collector. New Javascript tools for web map creation; new software tools like the Tracker mobile app and enterprise Jupyter notebook integration for collaborating on data analysis were also showcased.

WSDM Code Enhancement Project: IT Specialist Christopher began the long transition of migrating legacy .NET applications into scripting or browser-based options. In the future, this will make the applications (such as the WSDM Denormalizer) easier to maintain and help stay abreast of the latest versions of ArcGIS software. The browser-based development efforts will make the code more accessible to a larger group of WDFW staff members.

REGION 1

1) Managing Wildlife Populations

Bull Elk Dies: Wildlife Conflict Specialist Rasley was checking on a large herd of elk south of Walla Walla. After watching the elk walk and feed towards the Oregon state line as they

normally do, one large six by seven bull simply fell over and died within one minute. The bull showed no signs of injuries nor did he aspirate.

Grande Ronde Elk: Wildlife Conflict Specialist Wade spent one day checking the Grande Ronde area for elk activity and damage to hay stacks. Wade observed several herds of deer and elk feeding in areas where the snow has receded and exposed a small amount of green up. The prolonged snow cover has taken a toll on the deer and elk herds in the area and many of the animals observed appeared to be in poor condition. Wade also located three elk and one deer that had succumbed to the lack of food between the intersection Highway 129 and Cougar Creek Road.

Shrub Steppe Bird Survey: Private Lands Supervisor Earl, along with Biologists Baarstad and Gaston, participated in a Skype meeting with Research Scientist Vanderhaegen regarding potential bird survey sites on private lands in Spokane and Lincoln Counties. Private Lands personnel will be identifying desirable habitat and landowners within the focal areas to contact and attempt to gain access for the surveys, which will be conducted by the Audubon Society.

Mule Deer Monitoring: In the last two weeks, Biologists Wik and Vekasy have investigated three collared mule deer mortalities. These deer were captured in mid-February with a helicopter. The three deer have all been in poor body condition with little to no fat remaining. Two of the three were heavily scavenged, leaving little evidence as to cause of mortality. The third deer was relatively intact, likely dying from starvation. We expect deer and elk to continue to succumb to the winter conditions for a few weeks to come, until green-up can fully establish and become available to all the animals.

Bighorn Sheep Captures: District Biologist Wik was able to assist on one day of a three-day capture in Hells Canyon. Due weather preventing elk survey flights, District Biologist Wik assisted on the capture of 25 bighorns from the Redbird herd in Idaho and the Wenaha herd, which is shared with Washington and Oregon. The purpose of the capture was to test, or retest, animals for *Mycoplasma ovipneumonia*. If the animals test positive on two occasions, they will be removed from the herd as part of the “Test and Remove” management approach being implemented in five different herds in Hells Canyon. Asotin was the first herd this was attempted in and is now doing well.

Elk Surveys: Biologists Wik and Vekasy have been attempting to conduct the elk sightability survey since March 1. Only three hours of surveying has been conducted because of weather (fog) and helicopter maintenance issues. The survey is currently scheduled to restart on March 14.

Stevens County Turkey Removals: Wildlife Conflict Specialists Bennett and Seitz continued to monitor and capture wild turkeys in the Loon Lake area. The trap will be removed next week.

Wolf Monitoring: Wildlife Conflict Specialist Westerman talked with and coordinated with Conflict Specialists Bridges in Adams, Whitman, and Lincoln counties for doing wolf road surveys. The surveys are for the remaining possible two wolves that were part of a pack of three where one was shot in a caught in the act event. Westerman conducted two road surveys in Whitman and Lincoln counties in the Sprague area and did not spot any wolves or any sign. Westerman will continue to monitor the area.

Channeled Scablands Waterfowl Survey: Private Lands Biologist Gaston completed a survey for migratory waterfowl within the channeled scablands. The route ran from the Tyler area to south of Ewan. Ducks and geese were totaled and some water was still open despite the cold weather.

Sage Grouse Lek Surveys: District 2 Wildlife Biologist Atamian and Professor Casady, from Whitworth University, conducted the first survey of the sage grouse lek in Lincoln County, there will be several more over the course of the breeding season. No birds were observed displaying on the either of the sites used in previous years, however at least two males were heard displaying in the pre-dawn darkness. Additionally, while walking the area several sets of sage grouse tracks were cut in the snow, with several sets indicating at least a group of five sage grouse have been in the area. In addition, several sage grouse snow burrows were found. During cold nights sage grouse will burrow down into the snow for insulation and then burst forth in the morning to feed, dance, etc.

Sage grouse tracks and wing marks where it took flight in the snow in Lincoln County, and Professor Casady, Whitworth University

Burrows of two sage grouse that spent a night next to each other. The indents of snow farther back in the photo are where the birds started digging their burrow. The larger openings are where they spent the night and then exited in the morning.

Another sage grouse snow burrow observed while walking the area around the lek

Wildlife Area Emergency Closures: Wildlife Area Manager Dice worked with District Wildlife Biologist Wik to define several closure areas on the Chief Joseph and Asotin Creek wildlife areas to minimize disturbance to wintering deer, elk, and bighorn sheep from human activity. Dice followed the Public Access Management (PAM) procedure to get approval from core district team members, regional staff members, and Olympia staff members to implement the closures on approximately 27,000 acres of wildlife area lands in Asotin and Garfield counties. The closure areas include the 4-O and Grouse Flats wildlife areas, and the Shumaker Unit of the Chief Joseph Wildlife Area. Also included are lands on the Asotin Creek Wildlife Area south of the North Fork of Asotin Creek and lands south of the Campbell Grade. In addition, the Weatherly Unit is also closed. The closures will be lifted Apr. 1. Wildlife area personnel spent the majority of their Mar. 11 through Mar. 14, workweek posting closure signs in winter working conditions. ATVs equipped with tracks were used to access many snowed in boundaries. In addition to entry closures, Asotin County closed Cougar Creek Road on the 4-O Wildlife Area to public use in support of WDFW's efforts. Though closed to public use, private property owners still have access to their property should they have a need.

Closure signs on Cougar Creek Road installed by Asotin County

Example of signs used on the Asotin Creek Wildlife Area

Starving elk and deer on the 4-O Ranch Wildlife Area: Wildlife Area Manager Dice looked at elk, deer, and bighorn sheep on the 4-O Ranch Wildlife Area on March 13 along the Grande Ronde River. There were several groups of elk and deer at lower elevations along the county road. Dice did find five elk carcasses and a few deer carcasses. There is very little green vegetation available for feed. However, that should be changing soon with warmer temperatures and melting snow.

Elk carcasses on the 4-O Ranch Wildlife Area

Elk carcasses on the 4-O Ranch Wildlife Area

Elk and bighorn sheep on the 4-O Ranch Wildlife Area

Elk and bighorn sheep on the 4-O Ranch Wildlife Area

Snow at Grouse Flats on the 4-O Ranch Wildlife Area

Snow at Grouse Flats on the 4-O Ranch Wildlife Area

2) Providing Recreation Opportunities

Hunter Access - Lincoln County: Biologist Baarstad was contacted by three hunters seeking spring turkey hunting access in District 1. Baarstad continued to collect permission slips from Lincoln County landowners enrolled in the Hunt by Written Permission program.

Hunting Access - Walla Walla: Private Lands Biologist Thorne Hadley received a call from an individual looking for hunting access locations within Walla Walla County. Private Lands Biologist Thorne Hadley provided recommendations on several locations.

Hunt by Written Permission Card Collection: Private Lands Biologist Gaston began collecting permission cards given by landowners enrolled in the Hunt by Written Permission program, from last year. Cards were collected and landowners updated Private Lands Biologist Gaston with their views on the program successes and problems.

Landowner Contact: Private Lands Biologist Thorne Hadley was contacted by a landowner interested in WDFW access programs and potentially signing up property into an access program in Walla Walla County.

Providing Access to Land: Access Manager Daniel Dziekan has unlocked gates and plowed snow at early spring-opening access sites. Ice fishers have been taking advantage of these opened sites.

Kettle River Access Development: As part of the development of the parking areas on the newly acquired Kettle River water access sites, the Curlew Job Corps will be constructing and installing information kiosks for each parking area, and assisting with construction of a wildlife view blind on the northern site. CAMP has the development work planned for May-June 2019. Wildlife Area Assistant Manager Daro Palmer met with Curlew Job Corps personnel to review plans, and visit the Kettle River access site. Palmer will be providing the construction materials to Curlew Job Corps, who will pre-construct the kiosks. Once CAMP completes parking area development, Curlew Job Corps can quickly install the kiosks and finish the wildlife view blind, meeting the June 30 deadline for completion of this acquisition development project.

Wooten Wildlife Area Lake Conditions, March 8: Assistant Wildlife Area Manager Dingman attempted to check the lakes. There is a significant amount of snow on the wildlife area right now which has prevented the hatchery from being able to stock the lakes with fish prior to the opening of fishing season. Spring Lake and Deer Lake are frozen over. Blue Lake and Rainbow Lake have some open water and still have fish in them from last fall's stocking. The water has not been turned into Beaver/Watson lakes or Deer Lake yet because the snow is too deep to access the lakes with a pickup or the fish-stocking truck. The hatchery staff members walked in to check Big 4 Lake and opened the inlet to start water flowing into the lake. No fish screens have been turned on yet due to the freezing conditions and not wanting to destroy the screens.

W.T. Wooten Wildlife Area – Snow: Natural Resource Worker McKeirnan plowed the snow in the driveway at headquarters. Access Technician Heimgartner plowed a landing area in the snow on the food plot behind headquarters for the helicopter to land and refuel during annual elk surveys.

Campground 3

Camp trailers in Campground 1

Camp in Campground 3

Lone angler fishing Rainbow Lake

Wooten Wildlife Area Remote Camera: Assistant Wildlife Area Manager Dingman picked up the remote camera that was hung behind headquarters.

Bighorn sheep running through the food plot behind the Wooten headquarters

Blue Mountains Access Program Activity: Technician Heimgartner spent time servicing access sites at Heller Bar, the upper and lower Grande Ronde River, and at the Wooten Wildlife Area. The Wooten still has many sites covered in snow. Many of the lakes are still covered in ice as well. Technician Heimgartner also spent time servicing equipment, picked up material to construct monofilament recycling tubes, cleaned up the Asotin Creek shooting range, and assisted wildlife area staff members with posting winter closure signs.

3) <u>Providing Conflict Prevention and Education</u>

Deer in Walla Walla: Wildlife Conflict Specialist Rasley met with three homeowners in Walla Walla regarding several deer that decided to move into the area due to the deep snow and late winter conditions. Even though the deer have caused some damage to their trees and shrubs the homeowners all agreed to let them stay until the weather breaks.

Chicken Depredation: Natural Resource Technician Seitz received a call from a landowner in Stevens County that had six chickens killed by a bobcat. The chickens were secured in a coop but the bobcat found a small hole in the wire and was able to slip through. Seitz contacted the field technicians trapping bobcats for the Predator-Prey project and they will try to trap and GPS collar the cat.

Grande Ronde Elk: Wildlife Conflict Specialist Wade spent one day checking the Grande Ronde area for elk activity and damage to hay stacks. Wade observed several herds of deer and elk feeding in areas where the snow has receded and exposed a small amount of green up. The prolonged snow cover has taken a toll on the deer and elk herds in the area and many of the animals observed appeared to be in poor condition. Wade also located three elk and one deer that had succumbed to the lack of food between the intersection Highway 129 and Cougar Creek Road.

Cloverland Elk: Natural Resource Technician Heitstuman continued to monitor elk movements in the Cloverland area this week. Heitstuman observed elk and signs of elk movements in areas of the Asotin Creek drainage below the commercial crops in Cloverland. Due to continued poor road conditions in the area, Heitstuman identified multiple new observation areas to effectively monitor elk movements. As the snow recedes with the warmer temperatures, the elk will like move up into the newly exposed commercial crops and with the thawing muddy soil, the potential for crop damage will increase. Heitstuman also maintain contact with producers in the area and mapped his elk observations on Goggle Earth as well.

Wildlife Area Grazing Coordination: Wildlife Conflict Specialist Wade discussed the upcoming grazing season on the 4-O Wildlife Area with Wildlife Area Manager Dice. Wade will be working to set up meetings with producers who will have grazing leases on the 4-O Wildlife Area to discuss implementation of preventive measures. Wade and Dice will continue to coordinate efforts to throughout the grazing season. Wade will also be meeting with producers in the surrounding area as well.

Reported Dead Deer: Wildlife Conflict Specialist Wade responded to a request from the Pomeroy mayor's office regarding a dead deer next to a home in Pomeroy. Wade determined that the deer had been hit by a car and removed the carcass from the property. Natural Resource Technician Heitstuman responded to a report of a deer carcass being found in a small horse pasture in Asotin County, the property owner was concerned that the carcass could draw predators into his horse pasture. Heitstuman located the deer carcass and determined that the deer had died of natural causes and removed it from the property.

Asotin Turkey Issue: Wildlife Conflict Specialist Wade contacted a cattle producer in Asotin County who has been having turkey issues. The producer reported that after hazing and utilizing several damage permits the turkeys have been staying out of his feed lot and cattle feeders.

Columbia County Turkey Trap: Wildlife Conflict Specialist Wade and Natural Resource Technician Heitstuman loaded and transported the turkey trap from the Clarkston office to Dayton at Wildlife Conflict Specialist Rasley's request. Wade and Heitstuman set up the turkey trap for Rasley, due to him being busy dealing with multiple deer and elk issues in Walla Walla and Columbia counties. Wade and Heitstuman observed a large flock of toms and jakes in the immediate area.

Turkey tarp set up and baited in Dayton

Moose Relocation: Manager Dziekan assisted Conflict Specialist Kile Westerman, Sergeant Mike Sprecher, and Officer Dave Spurbeck with relocation of a young bull moose out of a residential neighborhood.

Conflict Specialist Kile Westerman and Sergeant Mike Sprecher hobble an anesthetized moose for transport out of town - Photo by Access Manager Daniel Dziekan

4) <u>Conserving Natural Areas</u>

Duck Stamp Proposal: Natural Resource Technician Seitz and Biologists Turnock and Dotts reworked their habitat restoration proposal. The original property that was the focus of restoration was no longer a viable option at this time.

Preserving Aspen Stands on the 4-O Ranch Wildlife Area: Biologist Woodall started work on a second call for Rocky Mountain Elk Foundation (RMEF) project proposals. He would like to purchase log posts and use RMEF volunteers to build a buck and pole fence around two small aspen groves on the 4-O Ranch. Past elk and livestock grazing has taken a toll on this species as any new growth suckers from adult trees are consumed by the local herbivores. Building a fence would exclude these herbivores and allow new aspen growth to mature and expand. If successful, we can expand the scope of the project and look at some of the other small aspen groves that could use some enhancement.

5) Providing Education and Outreach

Turkey Issues: Wildlife Conflict Specialist Westerman talked to the landowner where oat hay was put out to help draw the turkeys off his horse feed. The landowner reported that it has helped a little, but he turkeys were still getting into the horse feed, just not quite as bad. Westerman talked about maybe next year trying to put the oat hay on a willing neighbor's property to keep them off his before they are conditioned to the feed being there.

Turkey Damage: Wildlife Conflict Specialist Westerman met with landowner who has been having 200 turkey get into his hay barn and was looking for advice on how to keep them out. Westerman met with the landowner and discussed his options and also gave some netting to use for exclusion.

Elk Damage: Wildlife Conflict Specialist Westerman talked to a farmer who had just used a master hunter damage permit holder to kill a cow elk to address damage, to see how the herd has responded. The farmer was very pleased with the whole process and mentioned that the elk herd has moved away and are not getting into the cattle feed. The farmer will continue to monitor the situation and will call back if things change.

Moose on the Loose: Wildlife Conflict Specialist Westerman assisted fish and wildlife officers from Detachment 22 with capturing and relocating three moose in one day. One bull calf in the morning and a cow calf pair in the evening. All the moose had been residing in their respective neighborhoods for almost three weeks and were not leaving the area. The moose needed to be removed for public safety reasons as they were not leaving and residing in a highly populated area where they were likely being fed.

Three Calves killed: Wildlife Conflict Specialist Rasley met with an upset livestock producer regarding three newborn calves that were found freshly killed in his calving area in northwestern Walla Walla County. Rasley and the producer were able to determine the newborn calves were killed during the night by coyotes. Both agreed to move the dead calves away from the calving area and Rasley added three road-killed deer to the same area to draw the coyotes away from the newborn calves. So far, the idea has worked and the coyotes are now feeding on the dead calves and the road killed deer. No more calves have been lost as of today.

Herd of Bull Elk: Wildlife Conflict Specialist Rasley came across 23 bull elk while looking for elk with hoof disease. All the bulls were trying to stay out of the cold north wind while the outside temperatures were only 3 degrees.

Collared Wolf in Whitman County: Supervisor McCanna received a phone call from a Whitman County producer reporting a collared wolf adjacent to his calving area. McCanna met with the producer and saw the wolf, which was 300 yards from the calving area. McCanna tried a couple of frequencies and found that the wolf was the collared wolf from Montana. McCanna met with other producers in the area who are also calving to discuss nonlethal deterrents again.

Elk Damage Haystack: Wildlife Conflict Specialist Rasley met with a farmer regarding elk damage to his haystack. The farmer is currently trying to salvage what he can and is hauling the hay to another site.

Turkeys in Dayton: Wildlife Conflict Specialist Rasley met with a homeowner in Dayton regarding 30 plus turkeys that just showed up in town. Wildlife Conflict Specialist Wade and Natural Resource Technician Heitstuman were nice enough to bring the live trap over to Dayton and set it up while Rasley was dealing with other conflict issues.

One Deer Dies at Lyons Ferry Marina: Wildlife Conflict Specialist Rasley received a call from the marina owners regarding another deer they found dead next to their marina. The deer appeared to be very malnourished and died of natural causes. Rasley was able to checkout over 200 other deer in the immediate area and all looked to be doing just fine.

IWJV Field Trip: The Intermountain West Joint Venture (IWJV), an organization whose goal is to preserve priority bird habitats in 11 western states, held a state chairs' meeting in Spokane, March 11-14. A group of about 30 members took a field tour on March 13 that included an afternoon stop at Reardan Audubon Wildlife Area. To prepare for this stop, Access Manager Daniel Dziekan spent that morning clearing snow off the south parking lot, its access road, and the trail to the south blind. Wildlife Area Assistant Manager Mike Finch and Wildlife Area Manager Juli Anderson joined Wildlife Biologist Jason Lowe of the U.S. Bureau of Land Management, and Chris DeForest, Conservation Director of the Inland Northwest Land Conservancy, in giving presentations to the group. They discussed the wildlife value, purchase and restoration history, and current and planned habitat improvement projects, of Reardan Audubon and Swanson Lakes Wildlife Area.

Wildlife Area Assistant Manager Mike Finch, left, discusses habitat restoration with state chairs of Intermountain West Joint Venture, at Reardan Audubon Wildlife Area. Photo credit: Juli Anderson, Wildlife Area Manager

Kettle Falls Scout Troop Visits Sherman Creek Wildlife Area Headquarters: Wildlife Area Assistant Manager Palmer was contacted by a Boy Scout troop leader from Kettle Falls, who requested a tour of Sherman Creek Wildlife Area headquarters. The scouts came on Thursday evening, March 14, with tour highlights being the historic Kalstrom barn and all the wildlife mounts in the office. Palmer gave a history of the barn and explained life histories and habitat needs of various wildlife represented by the mounts.

Spokane Outdoor Show: Biologist Woodall worked with other WDFW staff members at the Spokane Outdoor Show to highlight and showcase our wildlife areas. It was his third year working the show and the highlight was hearing multiple compliments, over a dozen, from the public that they like the work we do and appreciate the work we do.

WDFW display table at the Spokane Outdoor Show

6) Conducting Business Operations and Policy

Nothing for this reporting period.

7) Other

Nothing for this reporting period.

REGION 2

1) Managing Wildlife Populations

Chelan Butte Bighorn Sheep Capture: In an effort to learn about bighorn sheep use of Chelan Butte, Conflict Specialist Bridges assisted Biologist Comstock by immobilizing two young rams who were still readily coming into to bait at the Chelan Butte sheep trap. The hope is that the collars on these rams will give us further insights into habitat use and foray behavior as the rams mature. Biologist Comstock modified the remaining GPS collars to allow them to expand as the rams grow. She also created cotton spacers so that they would eventually drop off.

GPS collars modified to allow for neck growth for bighorn rams

Biologist Comstock outfitting a young bighorn sheep ram with a GPS collar

Pacific Fishers: Biologist Comstock received a report from U.S. Forest Service of a sighting of a Pacific fisher in Chelan County. In winter of 2018, fishers were released near Darrington in the Mount Baker-Snoqualmie National Forest and in Newhalem at the North Cascades National Park visitor center. Confirmed historic records of fisher in Chelan County are spotty, but it appears the last documented record may date back to 1937. It is presumed that the animal in these photos is one of the released animals, and it may have travelled over 50 miles to the location where it was caught on a game camera.

Photo from http://www.marriedtoadventure.com/2019/03/11/rare-fisher-sighting/

Drone Burrow Surveys: We completed our pilot study, testing the effectiveness of using drones to survey for and map pygmy rabbit burrow sites on release sites. Traditional survey efforts involve ground-based belt-transects, which are effective in detecting burrow sites, but are labor intensive. The belt-transects are useful in areas where rabbit density is high and predictable, but very inefficient in areas where rabbit density is low or the distribution is not well known.

Our hope was to show that a drone (quadcopter) could effectively cover survey areas and the high-resolution imagery would be adequate to identify pygmy rabbit sign in the snow. This effort was delayed for most of December and January due to poor weather conditions, consisting of low snow levels, persistent overcast, and freezing fog. Finally, in February we received adequate snowfall and clear skies needed. The results were as we hoped. Imagery examples below show in clear detail pygmy rabbit sign was easily identified in the imagery. The drone flew a photo point grid at around 100 feet altitude and average speed of 15 to 20 miles per hour. Along the way, we experienced a significant learning curve with flight platforms, survey software, data processing, and general challenges of winter flight.

The imagery was able to document all locations that were known on the ground and the georeferenced imagery was able to provide accurate GPS coordinate of each suspected burrow site. Survey metrics are presented below and it is easy to see that this method shows great potential for efficiently and accurately documenting pygmy rabbit burrow sites and distribution during the winter.

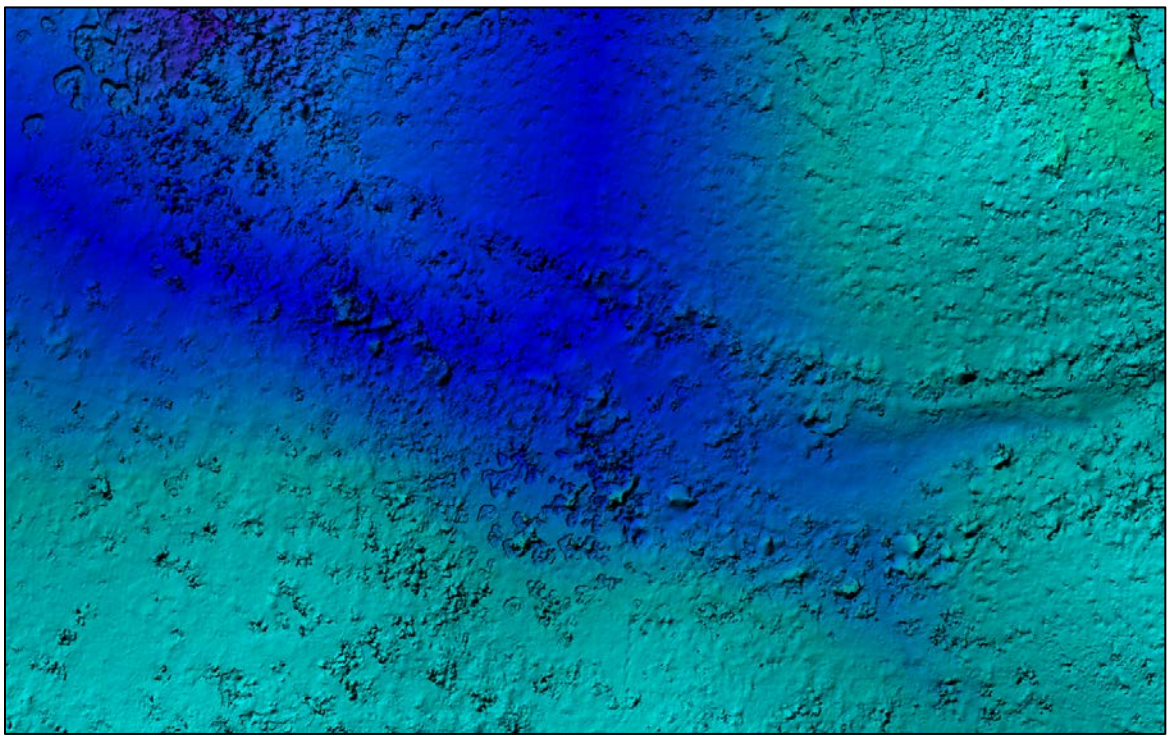
Below is a direct comparison of the drone flight vs traditional belt-transect survey for pygmy rabbit burrows on the Burton Draw release site.

Survey Metrics				
	Survey Time	**Staff Days**	**Area Covered**	**Acres/Hr**
Drone	7 hours	2	352 acers	50.3
Belt-transects	55 hours	9	267 acres	4.8

Drone operator monitoring survey flight in Beezley Hills Recovery Area

Drone imagery of pygmy rabbit survey. Rabbit tracks are clearly visible.

Drone imagery of pygmy rabbit burrow site, indicated by concentrated rabbit tracks



Drone imagery also includes high-resolution DEM output. Color scale represents 10ft elevation change. Drainage contours and sagebrush coverage (black blotches) are easily identified.

Deer Illness and Death in Adams County: Biologists and enforcement officers have been responding to reports of sick and dead mule deer in eastern Adams County between January and March. We received a few reports in January, but more animals were reported dead in early March. Five deer were submitted to Washington State University, Washington Animal Disease Diagnostic Lab (WADDL) lab from Adams County. Preliminary results include starvation and pneumonia, but we are still uncertain about a common cause. We are awaiting additional test results.

Mount Hull Bighorn Sheep Herd: Biologist Heinlen and Officer McCormick conducted a necropsy on a bighorn ram mortality in the Mount Hull herd. Samples were sent to the Washington Animal Disease Diagnostic Laboratory at Washington State University that determined the ram died of pneumonia caused by the bacterium *Mycoplasma ovipneumoniae* (M. ovi). M. ovi is the bacterium that triggers pneumonia outbreaks in wild sheep herds. M. ovi is commonly carried by healthy domestic sheep and goats, but infection of bighorn sheep may kill up to 80 percent of the herd and suppress population growth for years. This herd is co-managed with the Colville Confederated Tribes (CCT), thus both the WDFW and CCT are concerned about this development.

In discussions with WDFW Section Manager Harris, WDFW Veterinarian Mansfield, CCT Biologist Krausz, and WDFW Biologist Heinlen, it was decided to increase monitoring of the herd to determine the extent of the disease and obtain additional diagnostic samples. WDFW Biologist Heinlen and CCT Biologist Antoine have already started monitoring the herd.

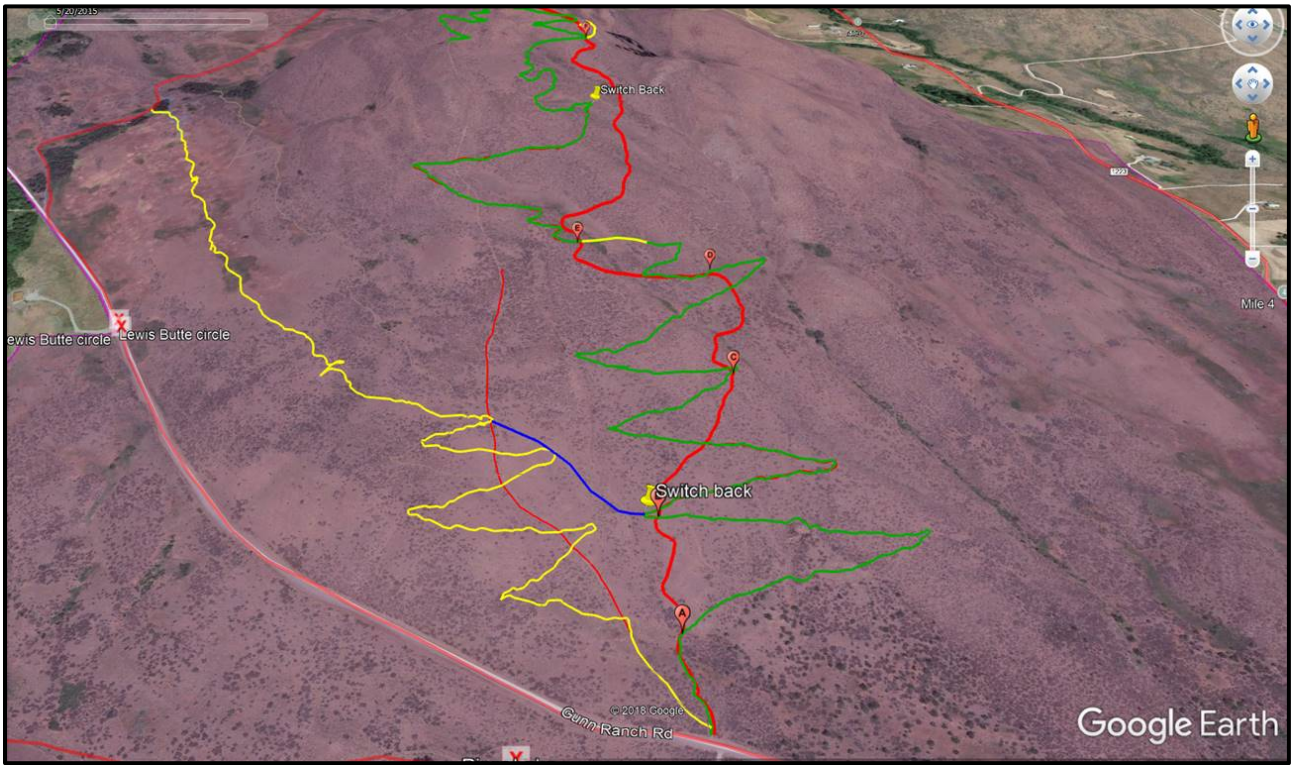
Northern Leopard Frog Recovery: Emily Grabowsky is our new Biologist for the Northern Leopard Frog (NLF) project. Before accepting this position, she obtained her Master's degree at the University of Northern Colorado, where she completed her thesis on the ecology and venom

composition of the twin-spotted rattlesnake. Before that, she worked with the Arizona Game and Fish Department (AZGF) on a lowland leopard frog and Sonoran Desert toad long-term monitoring project. She has also worked with Sonoran Desert tortoises with AZGF and large carnivores and ungulates at the Denver Zoo. Northern leopard frogs are considered endangered in Washington, and she is tasked with leading the survey and recovery efforts in the Columbia National Wildlife Refuge and surrounding areas. Northern leopard frogs typically begin breeding between March and May, so Emily is currently planning for the extensive survey effort that will take place in the coming weeks.

Adult northern leopard frog: https://wdfw.wa.gov/conservation/herp_atlas/speciesmain.html

2) Providing Recreation Opportunities

Lewis Butte and Riser Lake Trails: Manager Troyer has been working with members of the Methow Valley Trails Collaborative (MVTC) to start planning this year's trails and restoration projects. In the next few weeks, wildlife area personnel will team up with Evergreen Mountain Bike Alliance to finish building roughly one mile of trail at Lewis Butte. Evergreen will also use their machinery and expertise to fine tune at least switchbacks. These tasks will round out the Lewis Butte Trail project. From there, later in the spring, the Methow Wildlife Area will team up with the MVTC as well as many community volunteers to begin re-routes and trail construction across the street at Riser Lake. Upon completion of both projects, there will be over eight miles of interconnected trails between Lewis Butte and Riser Lake. Last year, over 230 volunteer days were logged on Lewis Butte alone. By the end of 2019, that number should exceed 400 days' worth of volunteer labor combined between the two trails. Those astounding numbers speak volumes about the local community and their passion for sustainable recreation.



Lewis Butte Trail: Red is the old, decommissioned trail that had an average slope exceeding 30 percent. Green is several miles of new trail that is already complete and averages a slope of 7-10 percent. Yellow and blue are the last remaining segments that we will build this spring, minus the yellow switchbacks on the lower left of the picture.

A rough draft of the proposed trail plans at Riser Lake that will commence this spring

March 1 Openers: Access staff members toured the March 1 openers to see if their snow removal efforts were worth the time. Quincy Lake had two groups ice fishing; Burke Lake had a few people ice fishing, and a few fishing the open water at the launch. Martha Lake had the largest crowd, and a large area of open water, and four people were ice fishing Caliche Lake. Catch rates were low, but the people that did come out to try it were very appreciative of our snow removal efforts.

Anglers fishing Burke Lake

Burke Lake on Saturday of the opener. The majority of these folks are fishing a narrow band of open water right in front of their vehicles (shown in the previous photo on Friday) - Photo by R. Finger

Corn Stubble: Biologist Walker submitted a Duck Stamp funding proposal for the corn stubble waterfowl habitat conservation and hunting program. Walker asked for $90,000 over the Biennium, which would provide $45,000 per year to both Regions 2 and 3 for corn stubble access funding. Under the program, landowners are paid $15 per acre and agree to leave standing corn stubble (i.e. to not till it under) over the winter and allow public waterfowl and upland bird

hunting through the Hunt by Reservation and Register to Hunt programs. By leaving cornfields un-tilled over the winter season, the program aims to provide additional forage resources to waterfowl in Grant and Adams counties. The program is well liked by the public and participating landowners. Biologists Walker and Hulett are currently working on the annual program report and a presentation to the Waterfowl Advisory Group.

3) <u>Providing Conflict Prevention and Education</u>

Mount Hull Bighorn Sheep in Orchard: Specialist Heilhecker met with an orchardist to discuss bighorn sheep damaging boundary fences. Approximately 30 bighorn sheep have been using his orchard for the past three weeks. A large ram jumps the fence and bends it over, allowing the rest of the herd to follow. She provided the orchardist with nonlethal deterrence measures.

Grizzly Bear Capture and Handling Workshop: Specialist Heilhecker attended a grizzly bear capture and handling workshop in Missoula, Montana. The workshop, led by grizzly bear experts from the U.S. and Canada, focused on different capturing techniques, chemical immobilization, animal care, and human safety.

4) <u>Conserving Natural Landscapes</u>

Mansfield Pond Tall Emergent Vegetation Control: Specialist McPherson has been seeing that the northwest corner of Mansfield Pond has been getting very dense patches of tall emergent vegetation. This portion of the pond is attractive to both waterfowl and hunters but with tall emergent vegetation, it has become less popular with both. Specialist McPherson mowed vegetation below its high water mark so it can be flooded and inundated with water, killing the vegetation.

Before and after mowing vegitation - Photo by C. McPherson

North Winchester Wetland Excavations: Specialist McPherson met onsite with Ducks Unlimited Engineer Brian Heck, and Halme Construction. During the onsite visit, we went over work that had been completed and addressed any last details of finish work that need to be completed before this phase of the project is finished. This project is setting back wetlands that had filled in by sedimentation and taken over by Russian olives to early successional wetlands. These productive wetland habitats will benefit waterfowl, wetland obligate, and wetland associated wildlife species in the area and furthermore provide a great recreational opportunity for the public.

Dozers contouring out at North Winchester - Photo by C. McPherson

Methow Watershed Protection: The John D. Dingell, Jr. Conservation, Management and Recreation Act became law on March 12, and with that, the Methow Headwaters Campaign has officially achieved the goal of permanently protecting 340,079 acres of land in the Methow Headwaters region from industrial-scale mining! This is a huge victory for supporters of wild places and the wildlife within. The Methow Headwaters coalition was a grassroots partnership of non-governmental organizations (NGOs), business leaders, local citizens, and elected officials at all levels. Government agencies engaged as well. Biologist Fitkin represented WDFW as a technical advisor at various field trips, meetings, etc.

'Nuff said! – Methow Headwaters Campaign – Benj Drummond

Sinlahekin Ecosystem Restoration Project: As part of the Sinlahekin Ecosystem Restoration project Sinlahekin Manager Wehmeyer, Maintenance Mechanic Boulger, Scotch Creek Assistant Manager Dupont and Natural Resource Technicians Sklaney and Medina hand thinned various units throughout the Sinlahekin Valley. They were removing small diameter pine and fir trees around larger trees. Most of the thinning was concentrated along the Sinlahekin Road. The intent is to create a more open landscape that was historically present and provide more suitable habitat for the variety of species that inhabit the Sinlahekin.

5) <u>Providing Education and Outreach</u>

Sinlahekin / Scotch Creek Wildlife Area Advisory Committee (WAAC): Manager Wehmeyer and Manager Olson led the annual WAAC meeting in Okanogan. The WAAC is made up of a variety of user groups and agencies that have an interest in how we manage the wildlife areas. This group also helped to identify the goals and objectives for the wildlife areas. During the meeting, Manager Wehmeyer and Manager Olson updated the group on their accomplishments in relationship to the goals and objectives in the management plan and discussed what they plans to accomplish during the year. The local Mule Deer Foundation

chapter also presented an update of their proposed Highway 97 Safe Passage project to the group. Land Operations Manager Haug provided updates on what is happening in Okanogan County as it relates to the wildlife areas and access sites that are in the county.

Methow Bird Nest Box Program: Assistant Manager Brasier met with Volunteer Hovis this week to discuss needs for the wildlife area's nest box program. Boxes installed at several locations across the wildlife area need to be cleaned out this spring before the bluebirds return to nest in a few weeks. Hovis also identified several boxes that should probably be located to reduce competition between bluebirds, house wrens, and house sparrows. There are also several large waterfowl nest boxes that Brasier constructed over a year ago, but has not had the opportunity to install. Brasier and Hovis discussed and decided to reach out to small group of people who already expressed an interest in assisting to complete the clean out portion of the work on Saturday, March 30. To complete the more labor intensive relocation of boxes and installation of the waterfowl boxes, Brasier will work with the Methow Conservancy to organize a volunteer event for Saturday, April 6. This event will be posted on the Volunteer Methow site for people to sign up. Brasier and Hovis are also hoping to recruit a couple volunteers to monitor boxes during the nesting season. Hovis has been able to monitor the boxes on Bear Creek Road, but more help will be needed to gather data from the boxes on the Rendezvous Unit and at the Cottonwood Trail.

Columbia Basin Duck Nesting Project: Biologist Rowan completed a plan to maintain and evaluate the use of artificial nesting structures for ducks, called "nest tubes." WDFW and many volunteers have installed over 100 nest tubes in Grant County over the past 20 years, but most are in states of disrepair. Very little time has been available to monitor these structures, and WDFW would like to work with volunteers over the next five years to make a more concerted effort at understanding use and nesting success. We will start with a subset of 50 tubes and add more in future years if resources and staff members and volunteers' time allow.

A maintained duck nesting tube installed on a local pond - Photo by WDFW

Wildlife Habitat Project Planning Assistance: Private Lands Biologist Braaten assisted a Douglas County landowner in regards to interest in pheasant habitat. Consult with landowner came from contact from the Pheasants Forever chapter after landowner attended a meeting looking for assistance. Private Lands Biologist Braaten provided guidance and after discussing

the landowner's vision was able to convince the landowner to seek equipment funds through Sage Grouse Initiative (SGI). The landowner set up meeting and signed up for funding. Private Lands Biologist Braaten met with the landowner again to discuss SGI approach and provide thoughts and further answers to questions. Landowner was satisfied with the direction he is going. Private Lands Biologist Braaten will be meeting with SGI staff members in June to ground truth projects on project sites. Private Lands Biologist Braaten also discussed progress with Private Lands Biologist Hughes about progress.

Indian Dan Wildlife Area Remote Cameras: Wildlife Area Manager Peterson spent a day with biologists from Douglas County Public Utility District (DCPUD) to replace memory cards in a series of cameras they placed in Indian Dan Canyon. Using the tracked UTV the wildlife area has to access the snowbound unit; they serviced eight cameras and made their way into the far northwest corner of this unit. At this elevation, the snow was approximately 2.5 feet deep. With snow this deep, the best way to get to the final camera was for the DCPUD biologists to put skins on their backcountry skis and 'skin' their way up a fairly steep hill to the camera. The intent of this camera work is to record species occurrence, numbers, and is an example of the interagency coordination and cooperation the agency employees to manage the natural resources of Washington.

DCPUD biologists skinning their way to the last camera - Photo by D. Peterson

6) <u>Conducting Business Operations and Policy</u>

Lori Jo Retires: Wildlife Area Manager Fox said farewell to Lori Johanson as she moved on from her customer service specialist position at the Wenatchee district office to a well-deserved retirement. It was sad to see her go but also happy that she will be able to spend more time with her family and traveling. Lori spent nearly 12 years helping and answering questions from our customers, constituents, and partners. She was absolutely indispensable to all the staff members in the office keeping well-informed with the activities and emerging issues of all the programs

and tending to all the big and little things that made for a smooth running office. Most all, Manager Fox will miss her cheery disposition and wonderful laugh ringing through the office.

Lori Jo's last day at work

REGION 3

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Winter feeding operations continue at the Cowiche, Nile, Oak Creek, and bighorn sheep feed sites managed by the Oak Creek Wildlife Area staff members. Elk numbers remained constant and they are in seasonably fair condition with four mortalities at the Cowiche feed site, one at Oak Creek, and two harvest mortalities at the Nile. Hay continues to be moved to Cowiche from the Oak Creek barn, and deliveries of purchased hay have begun to both locations.

L.T. Murray Wildlife Area Natural Resource Technicians Nass and Daling have been feeding approximately 750 elk at Watt Canyon and 550 elk at Robinson Canyon. The accumulation of over 12 inches of snow continues to prevent access to the normal feeding area in Robinson and an accurate elk count. There have been six total mortalities to date (three cows at Robinson and three calves at Watt).

Volunteers feeding on the L.T. Murray

Reintroduced Pronghorn Face Challenging Winter: District 4 Wildlife Biologist Fidorra received a report of several dead pronghorn near Prosser. Deep snow conditions and cold appear to have pushed some pronghorn groups down in elevation closer to town. Fidorra and Yakama Biologist Blodgett III found four carcasses in close proximity to each other. Enforcement assisted, and no signs of poaching were found. The animals were likely in weak condition and preyed upon by dogs or coyotes in the area. Two of the pronghorn were collared animals that had just been released in January on the Yakama Reservation right before the snow arrived.

A collared female pronghorn carcass (above) and fawn (below) inspected by WDFW and Yakama biologists near Prosser, Washington

Winter feeding continues at the Mellotte feed site on the Wenas Wildlife Area. Elk numbers have increased to 948 animals.

Elk on the feed site are in good condition, with only two mortalities this season on Mellotte.

Winter storms brought additional snow to the Wenas Wildlife Area during the first week of March and temperatures continued to be well below normal, with highs in the 20s to low 30s and lows in the single digits to teens. Temperatures finally climbed into the 40s on March 12 and are expected to stay there for a week before warming up to the 50s and back to normal temperatures for this time of year. With over 20 inches of snow still on the ground, the warmer temperatures are making for a rather sloppy feed site.

Wenas Wildlife Area personnel had to fix a tine that broke on the tractor forks used to load hay bales. Then a tire on the feed truck was punctured through the sidewall and a new tire had to be ordered so staff members went back to hand feeding with the backup feed truck for three days.

Mellotte feed site

Mellotte feed site

2) <u>Providing Recreation Opportunities</u>

Visitors continue to flood Oak Creek headquarters and visitor's center, especially on the weekends. In fact, the parking lot is typically almost completely filled and peak visitor count in one day is over 1,800. In addition, the wildlife area has seen abundant winter recreationists ranging from mountain bikers, snowshoers, and cross-country skiers.

Much higher than normal amounts of snowfall over the last six weeks resulted in many roads throughout the Sunnyside Wildlife Area being impassable. Staff members continue to spend a significant amount of time clearing roads to maintain access. In some locations, snowdrifts were as deep as four feet.

Deep drifted snow near the Upper Rupely parking area

Using the backhoe to clear snow from the Giffen Lake access road

Clearing access around the wildlife area

Snow removal at the North Windmill Ranch parking lot

Clearing the road to Windmill Lake

Region 3 Access Manager Garcia came across a minivan that had been burnt at the Mattoon Access Site. When he called it in, he was notified that it had been reported and that WDFW Enforcement had made contact with the registered owner and it was to be removed in a few days.

Burned minivan at Mattoon

3) <u>Providing Conflict Prevention and Education</u>

With the late and abundant snowfall, the Windmill Ranch Unit of the Sunnyside Wildlife Area has recently become home to a herd of 67 elk. At first, these elk were foraging on tall grasses throughout the unit. Then they found a standing corn field just east of the Windmill Unit. The elk began night raids on the private cornfields and the landowner contacted Conflict Specialist Hand. A Propane cannon has been used to deter the elk from feeding in the private cornfield. The elk

have shifted a few miles towards Worth Lake and the Propane cannon seems to be effective so far. Assistant Manager Kaelber, Natural Resource Technician Rodgers, and Conflict Specialist Hand continue to monitor the elk and their movements.

Elk at the Windmill Ranch Unit near Basin City

Mesa Area Elk Damage: Wildlife Conflict Specialist Hand received and responded to a new elk damage complaint from a landowner near Mesa in northern Franklin County. Sixty to seventy elk have been conducting raids on the landowners organic corn crop including trampling and consuming the corn. The cornfields are directly adjacent to WDFW's Windmill Ranch of the Sunnyside Wildlife Area. A LP gas cannon was deployed as well as providing pyrotechnics to the landowner for hazing in attempts to minimize the damage.

Elk damage to organic cornfield

LP gas cannon to haze elk

Master Hunters Assist with Deer and Elk Damage to Winter Wheat: District 4 Wildlife Conflict Specialist Hand continued to work with Kahlotus area landowners to address deer damage to winter wheat crops. Cold temperatures and heavy snow are making hazing operations difficult. One Damage Prevention Permit was extended for deer and two additional permits were issued for elk. Furthermore, Hand has coordinated with multiple master hunters and assigned them to landowners in the Kahlotus area for hunting/hazing activity. Two deer were reported harvested by master hunters in March so far. These master hunters come from the Region 3 deer damage pool.

Hanford Elk Activity: District 4 Wildlife Conflict Specialist Hand conducted hazing operations on several days after reports of elk were observed off the Hanford National Monument near Horn Rapids. Concerns of elk being involved in vehicle collisions along Highways 240 and 225 and possible poaching were received from the public.

Elk grazing on ridge above the Rattlesnake Mountain Shooting Facility

4) <u>Conserving Natural Landscapes</u>

Oak Creek Forester Hartmann continues flagging pre-commercial thinning unit boundaries for the Oak Creek Forest Health thinning project. Forester Hartmann also compiled survey data for Bald Mountain pre-commercial thinning prescriptions, and assisted with feeding operations at the Nile.

Grand fir regeneration under large overstory ponderosa pine above South Fork Oak Creek

Snow depth test at FS-1400/1401 junction after a long day of unit layout. Measured 3.7 feet on Feb. 21, 219 (Pole is eight feet tall with 1 foot striped segments)

5) <u>Providing Education and Outreach</u>

Wildlife Education Corps volunteers continue to staff the Oak Creek Visitor's Center daily from 10:00 a.m. to 4:00 p.m.

Manager Mackey scheduled a visit to Oak Creek headquarters by 100 Naches fifth graders for them to learn about elk, ecological processes, and wildlife management.

In addition, Manager Mackey has been working with the Eagle Scouts to collaborate on a project along a section of the William O. Douglas trail that crosses the wildlife area. The project involves trail markers and public information about the trail.

L.T. Murray Wildlife Area Manager Babik and Habitat Biologist Torrey led a “Build a Beast” station for 45 young women at Central Washington University’s Expanding Your Horizons event. The ladies collected animal parts based on clues and then presented their animal to their classmates.

L.T. Murray Assistant Manager Winegeart and Natural Resource Technician Daling installed the new interpretive panels on the kiosks at Joe Watt and Robinson Canyons.

Natural Resource Technician Daling looking at the newly installed interpretive panel at Joe Watt parking area

Newly installed interpretive panel in Robinson Canyon

L.T. Murray Natural Resource Technician Nass checked L.T. Murray winter closure signage. Some signs were missing and one was buried by a snow bank.

Missing map and buried sign along the Taneum Road (left), L.T. Murray winter closure area and replacement (right)

Over 100 people came to see District 4 Wildlife Biologist Fidorra's presentation in Seattle about the WDFW burrowing owl work going on in eastern Washington. Fidorra presented ecology and movement information gained during partnered efforts in Washington to install and maintain artificial burrows for burrowing owls, and annual banding and tracking studies.

Awaiting a burrowing owl presentation at the Washington Ornithological Society meeting

Othello Sandhill Cranes Festival in Eastern Washington: District 4 Wildlife Biologist Fidorra and Wildlife Area Staff have seen large flocks of Sandhill Cranes north of Tri-Cities, WA. Migratory cranes pass through the Columbia Basin staging in farmland and wetlands on their way north now through April. The best place to see and learn about this spectacle is the upcoming Sandhill Crane Festival in Othello, WA, March 22-24, 2019: https://www.othellosandhillcranefestival.org/ WDFW, a co-sponsor of the event, will have staff presenting a variety of topics and leading tours to see cranes and other wildlife in the area.

6) Conducting Business Operations and Policy

Nothing for this installment.

7) Other

Nothing for this installment.

REGION 4

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Wildlife Conflict Specialist and Natural Resource Technician Cogdal provided day and night coverage to haze elk on the Skagit Valley agriculture lands. The activity will be coupled with hunting activity from master hunters and run through the end of March.

Elk seeking refuge and forage in Skagit Valley on private property recently purchased for elk

Carnivore Camera Survey: District Wildlife Biologists Waddell and Moore visited trail cameras established by the department in Skagit County to monitor for forest carnivores. Only a few of the sites were accessible due to the recent snow storms.

Snow clouds descend on a ridge along Highway 20 during a recent trip to check trail cameras
- Photo by R. Waddell

Oregon Spotted Frogs: District Wildlife Biologists Moore and Waddell joined two U.S. Fish and Wildlife Service biologists and a biologist volunteer with the Whatcom County Amphibian Monitoring Program to visit current and potential breeding areas for the endangered Oregon spotted frog in Whatcom County. Though in some cases the crew had to trudge through some deep snow, they are preparing for Oregon spotted frog surveys to begin in late March.

Biologists evaluate a site for potential habitat modification to better suit the endangered Oregon spotted frog - Photo by R. Waddell

Pacific Flyway Wingbee: Waterfowl Specialist Wilson, Assistant District Biologists C. Moore and Rowan, and Wildlife Area Assistant Manager Hawk participated in the Pacific Flyway Waterfowl Parts Collection Survey, also known as Wingbee. The team joined around 30 other state and federal biologists at this annual event where approximately 27,000 wings sent in by hunters where examined by biologists to determine species, age, and sex. These data will provide estimates of the species, sex, and age composition of this year's harvest, which are subsequently used in waterfowl population models essential for establishing federal waterfowl regulatory frameworks.

Waterfowl Section Manager Spragens joined the group mid-week to collect samples from over 600 immature mallard wings harvested in Washington for isotope analysis. Results from these samples will hopefully reveal more about Washington mallard production as it relates to harvest within the state.

Waterfowl Specialist Wilson examines a wood duck wing to determine the age and sex of the bird harvested - Photo by ODFW, T. Akimoff

2) <u>Providing Recreation Opportunities</u>

Lake Terrell Boat Launch Dock Repairs: Due to the recent heavy snow and ice event, the boat launch dock at Lake Terrell was damaged by over a foot of ice piling up on it. Now that the lake has thawed out, fishing use is increasing. Natural Resource Technician Deyo disassembled the damaged area and repaired it to keep the dock useable for this season. We will need to work on securing funds to do more extensive permanent work to keep the dock useable for this season. We will need to work on securing funds to do more extensive, permanent repairs to the further rotting wood.

Natural Resource Technician Deyo repairing ice damage to the Lake Terrell boat launch dock

Ice damage to Lake Terrell boat launch dock

3) Providing Conflict Prevention and Education

Nothing for this reporting period.

4) Conserving Natural Landscapes

Nothing for this reporting period.

5) Providing Education and Outreach

Wildlife Conflict Specialist and Natural Resource Technician Cogdal performed a demonstration of nonlethal deterrents for Q13 Fox News as they were in the Skagit Valley doing a story on the Nooksack elk herd.

6) Conducting Business Operations and Policy

Nothing for this reporting period.

7) Other

The Wildlife Society: Biologists Milner, Wingard, and Waddell attended the Joint Annual Meeting with the Washington Chapter of The Wildlife Society, Society for Northwestern Vertebrate Biology, and Northwest Partners in Amphibian and Reptile Conservation in Grand Mound, Washington. The meeting included many different scientific presentations on various species and provided opportunities to network with biologists and wildlife students.

REGION 5

1) Managing Wildlife Populations

March Mudflow Elk Count: Biologist Stephens conducted the monthly winter elk count on the Mudflow Unit of the Mount St. Helens Wildlife Area. Three hundred fourteen elk were counted which was a high count for the winter. The classification of elk observed was 191 cows, 64 calves, and 59 bulls, which is a ratio of 31:100:34 (bulls: cows: calves). Although the surrounding hills have accumulated a lot of snow over the past few weeks, the Mudflow itself was mostly clear of snow.

Elk congregated on the Mudflow

Black-tailed Buck Survival Study: Biologists Stephens and Burlingame tried on three separate evenings this week to ground dart and collar black-tailed deer bucks for the buck survival study. A few dozen deer were observed, however, no bucks presented themselves as a potential for immobilization.

Willapa Elk Survey Flights: Region 5 District Biologist Holman assisted Region 6 and Headquarters staff members in completing three days of flights to survey elk in the northern portion of the Willapa Hills. Almost 900 elk were counted with raw numbers indicating a pretty strong number of calves and robust bull to cow ratios. Special thanks to JL Aviation and their pilot Rod Comstock for providing great service. A huge thanks to all the personnelwho assisted with the flights and flight following. District Biologist Novack will conduct the final analysis during the upcoming weeks.

Required Checks of Hunter and Trapper Killed Wildlife: With the trapping season nearing its conclusion, members of the regional wildlife and customer service teams have checked a variety of species at the regional headquarters in Ridgefield. Wildlife checked during the past week included one trapper with two river otters and six bobcats and another trapper with three otters and three bobcats. Additionally, with the continuation of late winter predator hunts, multiple bobcats and one cougar were checked as well. Hunter checks for these species are important aspect of their management. In addition to assuring that all regulations have been followed, biological samples are collected to assess the sex and age composition of the harvest. Thanks to the successful trappers and hunters for bringing their animals to WDFW for sealing and collection of samples.

Trapper harvested otters and bobcats

Hunter harvested cougar

Dusky Canada Geese: Biologist Burlingame surveyed areas in Clark, Cowlitz, and Wahkiakum counties for dusky geese. Several flocks of duskies were observed, including six duskies with red neck collars. Collar re-sights aid in determining survival and distribution of duskies that overwinter in southwest Washington. Large flocks of cackling, taverners, and snow geese were observed as well.

2) Providing Recreation Opportunities

Southwest Washington Goose Management Area 2-Inland: The late goose hunting season remains closed as of March 9. Biologist Burlingame checked goose hunters during the last week of the late season, collecting bag composition data and checking for any hunting violations. Seven geese were checked with no violations observed. An enforcement patrol on the Columbia River did contact a hunter with an unlawfully harvested dusky goose, which brings the total number of duskies taken during the 2018-19 goose season to three (GMA 2- Inland only).

3) Providing Conflict Prevention and Education

Coyote Depredations: Wildlife Conflict Specialist Jacobsen received several reports from cattle ranchers around Klickitat County regarding coyote depredations on young calves. Many of these ranchers have entered into contracts with U.S. Department of Agriculture (USDA) Wildlife Services to assist with their coyote issues. Jacobsen deployed several master hunter volunteers to these ranches to keep the coyotes at bay over the weekend and upcoming week and to watch over calving operations at night. However, coyotes continue to pose a problem for livestock producers. The producers contracted with Wildlife Services one week, but only one coyote was removed.

Losses to newborn calves continue on a nightly basis. Wildlife Conflict Specialist Jacobsen continues to deploy master hunters to the operations to assist in monitoring calves and keeping coyotes at bay during nighttime hours. Hopefully the snow will melt and decrease the predation on calves by coyotes.

Elk in Fence: Wildlife Conflict Specialist Jacobsen provided advice to a landowner who found a young elk calf stuck in the fence on his farm. The landowner was able to free the elk, but unfortunately, the elk did not leave the scene and did not survive the night.

Habituated Cougar: Wildlife Conflict Specialist Jacobsen and Sergeant McQuary deployed a live trap at a residence in Skamania County to catch a cougar that had become habituated to human presence. This cougar had been regularly killing feral cats and sleeping in structures at the residence. Most recently, the cougar was found sleeping on top of a table, under a fox light predator-deterrent that Jacobsen deployed earlier in the week. The trap was baited with a road-killed deer carcass.

Cougar trap

Garbage Thief: A concerned landowner contacted WDFW regarding trash that had been pulled out of her dumpster. Wildlife Conflict Specialist Jacobsen contacted the landowner and discussed the situation. The most likely explanation was that a black bear had climbed into her metal dumpster, pulled a trash bag out of it onto the ground nearby, and began feeding on the trash. Jacobsen provided advice on living in bear country and instructed the landowner to securely fasten the lid to her garbage dumpster as soon as possible.

Wolf Observation Report: A landowner contacted Wildlife Conflict Specialist Jacobsen regarding a dark-colored coyote that he saw on his property a few weeks ago. The landowner reported that this same animal killed a neighbor's chickens and a domestic dog. Jacobsen asked the landowner to have the neighbors contact Jacobsen in order to get the full report of the situation. Jacobsen also requested that the landowner contact him if the animal is observed again.

Goat Husbandry: Officer Budai responded to a call in Clark County of a depredation on two goats. It was not possible to determine the cause of the injuries to the goats (one was taken from the site by the predator), but after discussing the situation with Wildlife Conflict Specialist Jacobsen, it was determined that the most likely culprit was a coyote. Extensive digging under the livestock fence further reinforced this theory. Jacobsen made contact with the landowner and reviewed information regarding livestock husbandry, coyote biology and behavior, fencing solutions, and predator deterrents.

Dead Goat: Wildlife Conflict Specialist Jacobsen, Sergeant Anderson, and Officer Van Vladricken responded to a report of a dead goat in Clark County. The landowner believed the goat had been killed by a cougar, and was afraid to go outside. After responding to the residence, the only part of the goat that could be located was a piece of hide and some bone fragments. The entire fenced pasture was searched, but no other signs of the goat could be found. Coyote scat was found in the pasture, and feeding patterns on the remains of the carcass suggested that coyotes had scavenged part of the carcass, but cause of death could not be determined. The residence was located in poor cougar habitat, and it is unlikely that the goat was killed by a cougar. The landowners have regularly had issues with coyote depredation on fowl in the past. Advice was given on husbandry to protect the remaining goats on the property.

All that could be found of the small goat carcass

Elk in Stored Grain: Wildlife Conflict Specialist Jacobsen continues to work with dairy farms where elk are coming in and eating, sleeping, and defecating in feed grain. The dairy operators plan to utilize damage permits if they can catch the elk on the dairy during daylight hours. Jacobsen will deploy a portable wildlife hazing device as well to haze the elk away from the feed. The deep snow (over 4 feet accumulated) presents a challenge, as natural forage for the elk is fairly limited in the area. Jacobsen and Biologist Wickhem worked a nighttime stakeout of one of these dairy farms. The goal of the stakeout was to haze the elk away from the dairy as well as to attempt to capture and collar an elk to track migration movements, if feasible. The elk decided to wait until late at night to approach the grain bins. A capture effort was not feasible when the

elk approached the grain, so the effort switched to an aggressive hazing action. Explosives and rubber buckshot were used to chase the elk out of the dairy operation. The deep snow made pursuit of the elk rather challenging, but despite floundering in the snow, WDFW staff did not relent. Additional explosives were loaned to the landowner to continue hazing the elk during subsequent nights.

Keeping watch over the dairy and waiting for elk to arrive

Wildlife Conflict Specialist Jacobsen hazing elk with exploding cracker shells

Unknown Animal in Chicken Coop: Wildlife Conflict Specialist Jacobsen followed up on a complaint of a "fisher cat" getting into a chicken coop. After discussing the incident with the reporting party, it did sound likely that the culprit was a small mammal of some sort, but unlikely that the landowner was dealing with a fisher (*Pekania pennanti*). Jacobsen provided advice on securing the chicken coop and deploying predator deterrents. The landowners will install a trail camera and report on what is captured by the camera.

Eagle Depredations: A livestock producer contacted Wildlife Conflict Specialist Jacobsen regarding a group of eagles that attacked a newborn calf. The calf became stuck in the deep snow shortly after birth, and the eagles attempted to consume the calf before the landowner could free it. Unfortunately, the calf had to be euthanized due to the injuries it sustained from the eagles. Jacobsen inspected the scene, provided husbandry advice, and loaned a hazing device to the producer to haze the eagles and ravens away from his calving operation.

A young calf that was attacked by eagles shortly after birth

Beaver: Wildlife Conflict Specialist Conklin provided advice and trapping information to a landowner in Lewis County who is experiencing beaver damage.

Elk: Wildlife Conflict Specialist Conklin deployed two disabled hunters to a farm in Wahkiakum County. Both disabled hunters harvested elk. In addition, Wildlife Conflict Specialist Conklin coordinated with a charity to receive an elk.

4) Conserving Natural Landscapes

Nothing for this reporting period.

5) Providing Education and Outreach

Pierce National Wildlife Refuge Shrub Planting Work Party: Biologist Bergh gave an educational presentation on western pond turtles and the habitat restoration projects that are currently happening at Pierce National Wildlife Refuge. There are two main restoration projects happening for the benefit of western pond turtles and one project is part of a competitive State Wildlife Grant (SWG) that WDFW received in 2018. The project aims to improve nesting habitat by clearing invasive plant species and replacing them with native grasses and shrubs as well as building a nesting hill that will be higher than the ordinary flood elevation. The refuge is subject to high water, especially during spring freshets, that is dictated by releases from Bonneville Dam. The nesting hill will also be surrounded by predator-proof fencing that will hopefully deter nest predators like raccoons. The volunteers at the shrub planting work party heard all about western pond turtles, were able to handle some turtle shells, asked many great questions, and even got to see some turtles basking on one of the first warm sunny days this spring.

Mount St. Helens Wildlife Area Public Meeting: Wildlife Area Manager Hauswald, Assistant Manager Wildermuth, District Wildlife Biologist Holman, and Regional Wildlife Program Manager Jonker attended a meeting at the regional office, in which the public could comment on the Mount St. Helens Wildlife Area Management Plan. The meeting consisted of a short presentation by Manager Hauswald and Planner Vigue to start the meeting, followed by staff members answering questions and taking comment from the public. This meeting was part of the planning process and initiated the 30-day SEPA process for the public to provide comments. The meeting was not well attended and only seven members of the public were present.

Community Outreach: At the request of a local community council group, Wildlife Conflict Specialist Jacobsen and Biologist Wickhem delivered a presentation on Living with Wildlife to the group. Approximately 15 to 20 community members were in attendance to learn about deer, elk, small mammals, and large carnivores that occupy Skamania County. The presentation was well received, and several attendees had great questions about their local wildlife.

6) Conducting Business Operations and Policy

Annual Wildland Fire Fighter Training: Klickitat Wildlife Area Manager Van Leuven and Assistant Manager Steveson attended annual wildland fire fighter refresher training in Selah. Training focused primarily on field safety practices, firefighting strategies, and fire behavior. The training was presented by members of the WDFW Prescribed Burn Team. Prescribed burning practices and objectives were also discussed. Most attendees were from WDFW but several personnel from Washington State Parks were also among the group.

Assistant Manager Steveson completed the Work Capacity Test, which is required for maintaining his red card as a Fire Fighter 2 (this certifies him as approved for work on active fire management). For the Work Capacity Test, participants demonstrate their ability to perform strenuous work by walking three miles in 45 minutes or less, wearing a vest loaded with 45 pounds of weight. Everyone completed the test in less than 45 minutes.

Work Capacity Test – WDFW personnel from the Klickitat, Wenas, L.T. Murray, and Oak Creek Wildlife Areas completed the work capacity test required for maintaining Fire Fighter 2 certification

7) Other

Nothing for this reporting period.

REGION 6

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Clearwater GMU (615) Elk Composition Survey: Biologist Murphie participated with Quinault Indian Nation wildlife biologists conducting a composition flight for elk in the Clearwater GMU. Flying approximately 385 miles, this flight took six hours on one day. Biologist Murphie reports a preliminary count of 609 elk. Preliminary total bull to cow ratio was within management objectives at 13.6 bulls per 100 cows. At 24.5 calves per 100 cows, the calf to cow ratio was lower than we would like to see at this time of the year.

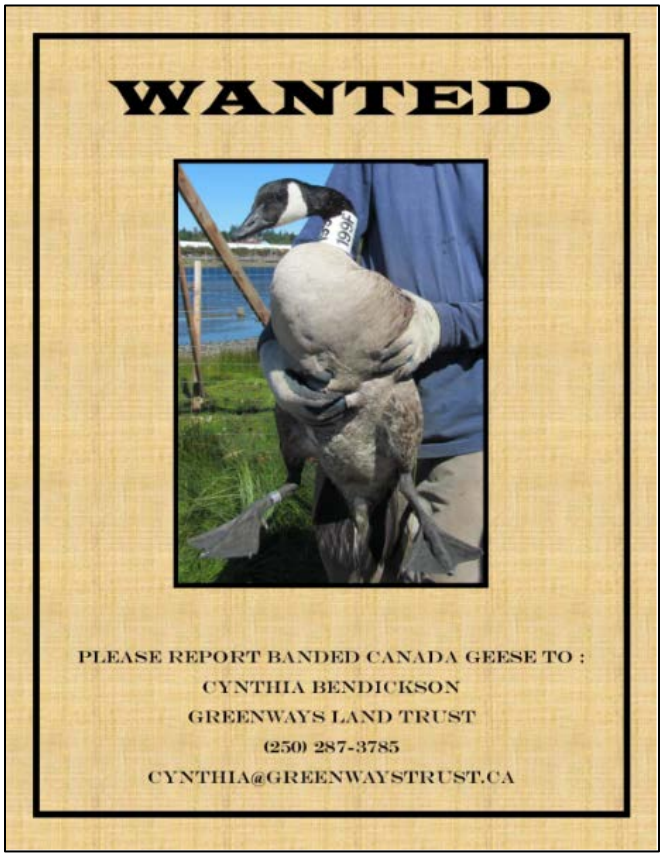
Photo of one group of elk seen during the Clearwater elk flight

Willapa Elk Survey Flights: District 17 staff members, with assistance from Region 5 and 6 and headquarters personnel, completed three days of flights to survey elk in the northern portion of the Willapa Hills. Almost 900 elk were counted with raw numbers indicating a pretty strong crop of calves and robust bull to cow ratios. Special thanks to JL Aviation and their pilot Rod Comstock for providing great service. Huge kudos to all of the staff members who assisted with the flights: Eric Holman, Warren Michaelis, Emily Butler (aka "Orange Crush"), Darric Lowery, Matt Blankenship, Kyle Garrison (aka "Snickers"). Customer Service Specialist Debbie Moe provided flight following from Montesano. District Biologist Anthony Novack ("El Tigrero") will conduct the final analysis during the upcoming weeks.

Dusky Goose Survey: Biologist Michaelis, Sundstrom and Novack surveyed portions of Pacific and Grays Harbor counties for marked dusky Canada geese and other geese. New groups of dusky Canada geese appeared to have moved into this area as observed by new combinations of collar codes. Good numbers of other Canada geese were observed in the area as well.

3/4/2019	Cackler	#banded	Aleutian	#banded	Tav/Lesser	#banded	Dusky	#banded	Western	#banded	Wusky	#banded	GWF	Snow	Unknown	Totals
Grays Harbor County	290		0		436		435	5	367		0		38	2	450	**2,018**
North Pacific County	792		0		511		1,575	23	0		0		0	0	1725	**4,603**
South Pacific County	5,508	0	0	0	410	0	1,505	38	43	0	0		0	0	179	**7,645**
Total	**6,590**	**0**	**0**	**0**	**1,357**	**0**	**3,515**	**66**	**410**	**0**	**0**	**0**	**38**	**2**	**2,354**	**14,266**

One goose marked from a study in Campbell River, British Columbia was observed near the town of Nahcotta, on the Long Beach Peninsula. Their "Wanted Poster" had been distributed to areas in Canada but apparently not in Region 6.



Oregon Spotted Frog: Biologists in various counties from the Columbia River north to the Canadian border begin conducting Oregon spotted frog surveys in mid-February. With this year's extended winter, spotted frogs have gotten off to a slow start. Biologist Tirhi, and volunteers Terry and Bartley spent a morning conducting the first of two spotted frog surveys at

a traditional breeding site on Salmon Creek. Water levels were extremely low at the site compared to normal years and water connectivity, which the frogs rely on, was severely compromised. Water temperatures were also lower than spotted frog prefer to lay eggs in. No spotted frogs nor eggs were seen nor heard. Warmer temperatures and possible rains over the next several weeks will hopefully encourage spotted frogs to begin breeding at this and other breeding sites. The team will return in approximately 10 days to repeat the survey. Biologist Tirhi and volunteer Terry also spent an afternoon scouting sites in Thurston County with the potential to support spotted frogs breeding and requesting landowner permission for access. These surveys will begin next week.

Salmon Creek Oregon spotted frog breeding site, awaiting return of the rains and warm weather

Volunteers Terry and Bartley assisting with surveys at Salmon Creek

Biologist Butler along with United States Fish and Wildlife Service (USFWS) staff members and Nisqually Land Trust personnel and volunteers surveyed a potential area for Oregon spotted frog egg masses. The northern section of the property was found to have very low water levels with little habitat for the frogs. Survey efforts shifted to the south where more promising habitat was found. Two red-legged frog masses and a northwest salamander egg mass were found during the search effort, but no Oregon spotted frog egg masses were found. Water temperatures were still colder than normal suggesting the survey may have occurred too early.

Personnel from Nisqually Land Trust, USFWS, and volunteers surveying for Oregon spotted frogs

Red-legged frog egg mass

Purple Martin Box Repair: Biologist Butler assisted the Point Defiance Zoo with repairing and cleaning out nest boxes within a purple martin colony in the Tacoma area. Purple martins are the largest swallow in North America. Due to habitat loss, fewer natural nesting cavities exist and nesting boxes have been established to support this species. Last year, this colony was reported at full capacity. With the birds set to return in April, the boxes needed some TLC to get them ready. Two boxes were replaced and an additional two were put up at this site. All the boxes were cleaned out and are now ready for the nesting season. A big thanks goes out to the Point Defiance Zoo staff members and volunteers for maintaining and monitoring this colony. In addition, we would also like to thank Pierce County Parks and Recreation personnel and BNSF Railway staff members for assisting with access to the site.

Purple martin nesting box repair - Photo credit: Zachary Hawn

A bird's eye view from a purple martin nest box Photo credit: Zachary Hawn

Swan Electrocution: Biologist Ament received a report of an adult trumpeter swan that had been found dead along Smuck Road in Sequim. A farm manager collected the swan and it was delivered to the Dungeness River Audubon Center. Biologist Ament obtained information about exactly where the swan was found and went to investigate. She found a feather pile directly below the power line along the road. She retrieved the swan and took it to Greywolf Veterinary Hospital. The swan had two prominent open wounds in two locations on its back. Necropsy confirmed that the swan had died from electrocution. The gizzard and liver samples were taken for lead testing. The swan and samples were delivered to Martha Jordan. Biologist Ament has worked with Clallam County Public Utility District (PUD) and there were diverters on the lines near where the swan was found. She will initiate discussions with PUD about putting more diverters in specific locations to prevent further swan mortalities.

Dead swan with wounds to back

Feather pile below the power line

Swan/Sample Transport: Biologist Ament retrieved frozen dead swans and gizzard and liver samples from her agency freezer located at the Dungeness Hatchery. These items needed to get to Region 4 for inclusion in the lead analysis project. Biologist Ament had oiled sea otter training in Seattle, so she combined efforts to deliver the swans and samples. She met with Martha Jordan and provided her three dead swans and accompanying samples. Two swans had died from electrocution, one juvenile in 2017 and one adult last week. The other adult swan died from a respiratory illness in 2018. The samples will be included in the ongoing lead analysis project in Region 4 and will be sent off for testing in Canada.

Trumpeter Swan Monitoring: Trumpeter swan monitoring in the Dungeness Valley was initiated the first week of November by local Olympic Peninsula Audubon Society (OPAS) volunteers. Two teams of surveyors monitor on the same day once a week. One team covers the habitat use areas west of the Dungeness River and another team covers the habitat use areas east of the Dungeness River. Both teams survey during the same time period during the day.

The following was reported for the weekly survey conducted on March 12, 2019: West Side – *Sonia and I had great weather going west. We saw a total of 13 adult swans. Six at the Wheeler farm 0ff Ward and seven at the Clapp farm off Lotzgesell. None at Dungeness or the other places.* **East Side -** *Kendra and Kathy: Weather turned beautiful for us too! We saw 144 (19 juveniles) trumpeters in and around the Port Williams and Schmuck roads farm fields but none in any other areas. In the back part of the north side of Port Williams there were 44 (three juveniles); on the south side of Portt Williams we counted 46 (four juveniles) and these were spread out along a dip, some down resting and some moving so may have been more. On the west side of Schmuck, close to the Smith farm driveway, we counted 25 (eight juveniles). In this group many were resting and bunched together so also difficult to be sure of the count. On the east side of Schmuck we first counted three groups as five were in the standing water and 13 much farther back behind that area but while we were counting a group on the ridge to the south of that area, 11 counted there, the birds in the water joined the group farther back so we counted*

them as one group. Most all of the birds we counted were resting or grooming as opposed to eating in the pasture/hay fields. Enjoyed the count even if the swells in the land and the moving birds entailed re-counting and re-counting. **Total Swans = 157.** The swan numbers are starting to decrease. Monitoring will continue until the second week of April.

Makah Copper and June's Copper Candidate Assessment: Biologist McMillan consolidated all District 16 records for Mariposa Copper, verifying sources and specifics and searching for any additional observations of these Copper butterflies. A couple of historic records were discovered during the review and more clarification has been requested for a couple of records. Biologist Potter requested that all records (even from the same site) should be entered into the WSDM system, including each different date. Biologist McMillan has followed up to retrieve these additional visit records from observers.

2) <u>Providing Recreation Opportunities</u>

Waterfowl Hunting Meeting: Wildlife and Enforcement Program staff members met to discuss issues that came up over the winter at two waterfowl hunting sites managed by WDFW. Both have a nexus with private landowners who are allowing public hunting on their land. In addition to background on the issues, the group worked on potential solutions to explore prior to the next hunting season. One location is connected to the Lower Dungeness Wildlife Area in Clallam County. The other location is the Short Farm located near Chimacum in Jefferson County. District and private lands biologists, the wildlife area manager and fish and wildlife officers will continue to work together to attempt to address the landowner concerns with the goal of keeping these areas open for public hunting. Wildlife staff members thank Sergeant Rosenberger who heard and recognized these issues, for organizing the timely discussion.

Goose Hunter Field Checks: Biologist Sundstrom wrapped up the extended inland goose season and hunter checks; the last hunt day was Saturday, Mar. 9.

The table below is for the inland zone only between Feb. 17 and Mar. 9. One-half (29) of hunters, either checked or those who provided phoned-in information, were unsuccessful at harvesting any goose during this period.

Scatter Creek Wildlife Area Public Workshop: On March 4, WDFW staff members from multiple programs hosted a public workshop for the Scatter Creek Wildlife Area planning process. The workshop was located at Swede Hall in Rochester. A great deal of WDFW effort was put into providing information about the wildlife area, the current planning process, as well as general fish and wildlife information. The workshop was primarily an open house style meeting with a few short presentations. There were about 45 stakeholders and community members of the Scatter Creek Wildlife Area in attendance. Staff members received a significant amount of feedback and interest from the attendees regarding activities on the Scatter Creek Wildlife Area units that will help guide the next steps in plan development. Great support and appreciation was displayed by all involved. Thank you to everyone that participated!!

Date	County	# of Hunters	✓'d or PI	2018 - 2019 Late Season - INLAND Only data Goose Species Reported or Recorded									
				Cackler	Aleutian	Taverner	Lesser	Dusky	Western	GWF	Snow	UK/Other	None Harvested
2/17	GH	2	✓'d										*X*
	GH	2	✓'d										X
	GH	3	PI										X
	GH	2	PI						2				
2/20	GH	8	✓'d			9	1		10		1		
	GH	3	✓'d										X
2/23	GH	5	✓'d						15				
	GH	2	✓'d										X
2/24	GH	4	PI										X
2/27	GH	2	PI										X
3/02	GH	2	PI						4				
3/03	GH	2	PI										X
3/06	GH	6	✓'d						20				
	GH	3	✓'d										X
3/09	GH	4	PI	6					7				
	GH	2	✓'d						8				
	GH	4	✓'d										X
	GH	2	PI										X
Totals		58		6	0	9	1	0	66	0	1	0	10
	X	*hunters contacted on WDFW land which Is CLOSED to goose hunting; no geese taken*											

District 17 goose hunter field checks. ✓'d = field checked, PI = Birds phoned in and classed as to what the hunter(s) believed them to be.

Winter Storm Clean Up: The water access team cleaned up downed trees and brush at nine sites in three counties. Access to ramps and parking lots were completely blocked at certain sites. The crew used a chipper, chain saws, pole saws and blowers to remove the debris. Many more sites suffered the same damage and are currently being addressed.

Carney Lake

Lake Deveraux

Black Lake

Black Lake Finished

Successful hunter with first bobcat

Bobcat Seal: Biologist Butler met with two hunters who needed their bobcats sealed. It was the first bobcat for both of them and they were very excited. After checking each hunter's license, all the required information was collected and the bobcats were properly sealed.

3) <u>Providing Conflict Prevention and Education</u>

Crop Damage at Nash's Farm (Update): In the last bi-weekly report Biologist Ament reported that five acres of purple sprouting broccoli and a special cauliflower crop planted by Nash's Organic Farm were decimated by trumpeter swans during a two-day period when dense snow blanketed the Sequim-Dungeness Area. Conflict Specialist Blankenship provided a response that directed the farm owners to the USDA Farm Service Agency Noninsured Crop Disaster Assistance Program and encouraged them to obtain crop

insurance. The farm owners decided to start a GoFundMe campaign to help them generate funding. See Sequim Gazette story at: sequimgazette.com/Nash. The farm originally set a goal of $20,000 and this was quickly met. They increased the goal to 35,000 and at last check, they have received $30,225 in donations. The community obviously appreciates the local organic farmers and the swans that visit in the winter.

4) Conserving Natural Landscapes

Equipment Repair/Refurbish: The Region 6 Olympic Willapa Hills Wildlife Area staff members, although shorthanded, have continued to refurbish a 1972 Ford F-5000 tractor. This tractor needed hydraulic repairs, steering and suspension rebuild, wiring and electrical upgrades as well as paint. This tractor is imperative to the operations during the annual farming and fertilizing seasons. *Editor's comment:* This critical piece of equipment is *49 years old* and still does its job, due in no small part to Wildlife Area Manager Gerchak's diligent and skilled efforts to make sure maintenance and repair schedules are kept and met.

Tearing Down

After paint and repairs

Preserving Natural Barriers: Olympic staff members also curtailed the PUD orders for a private contractor to cut screen trees down at the Malinowski Unit of the Olympic. These trees are imperative to provide screening and keep unauthorized vehicles out of the elk forage areas.

Tree cutting at Malinowski Unit

The Olympic staff also took Program Manager Calkins on a tour to look at the tree-cutting site as well as some of the other Olympic units but were cut short due to excessive snow in the foothills.

Being shorthanded, the Olympic staff members have worked tirelessly to continue a smooth operation and have continued to make time to assist with invasive weed control at Scatter Creek.

5) Providing Education and Outreach

Woodard Bay Facebook Live: Biologist Tirhi and Department of Natural Resources (DNR) Site Manager Zuckerberg were interviewed at the *Woodard Bay* Natural Resources Conservation Area for the DNR Facebook website. The recording was arranged by WDFW Communications Specialist Wettstein. Tirhi related information about the wildlife that could be viewed and enjoyed at Woodard Bay, best times to see wildlife, WDFWs mandate and what are WDFW's priorities in terms of wildlife and habitat. Zuckerberg relayed information about Woodard Bay, why visit this site, things to be mindful of in terms of wildlife security, and the partnership between the two agencies.

6) Conducting Business Operations and Policy

Work Planning: Region 6 district and assistant district biologists, headquarters Game Division and Diversity Division staff members and Program Manager Calkins met to begin work on the district work plans for the 2019-21 biennium. The work planning process uses a matrix of activities that allows a practical picture of how much work time is available in each month, which in turn helps us guide priorities and budgets. In some cases, this can mean a recognition that some work may not be completed if there is not enough time available within existing resources/budgets. With this initial discussion of desired work completed, the next step is for the districts to input the amount of time across the calendar months for each activity so the evaluation of future work can occur.

7) Other

Hazwoper Training: Biologist Ament attended an Oiled Wildlife Hazwoper Training held in Port Angeles. Hazwoper stands for Hazardous Waste Operations and Emergency Response. This refresher training is required annually for individuals who may be called upon to assist with the recovery of wildlife during an oil spill.

Oiled Sea Otter Training: Biologist Ament attended a one-day Oiled Sea Otter Training event in Seattle. Participants included other WDFW personnel, USFWS biologists, aquarium and zoo staff (including Canada), along with wildlife rehabilitators and other volunteers. Randall Davis and Terrie Williams from International Wildlife Research presented on the process of otter rehabilitation. They were involved with the recovery and rehabilitation of sea otters during the Exon Valdez oil spill. The training provided a beneficial forum for understanding the current plan in dealing with oiled sea otters in Washington and discussing potential ways to improve the plan.