Wildlife Program – Bi-weekly Report

July 1 to July 15, 2019

DIVERSITY DIVISION

HERE'S WHAT WE'VE BEEN UP TO:

Guano accumulation is evidence of a bat colony

1) Managing Wildlife Populations

White-nose Syndrome/Bat Monitoring: WDFW Biologists Tobin and Salzer investigated four bat colony reports that the public submitted through the online system (http://www.wdfw.wa.gov/bats). Tobin and Salzer were able to confirm that two of those reports are bat colonies. One is a little brown bat (*Myotis lucifugus*) colony and the other is a mix of the little brown bat and Yuma myotis (*Myotis yumanensis*). The purpose of these surveys is to determine the size of the colony, the species and assess the site for future monitoring (e.g., colony counts, colony health) and white-nose syndrome surveillance.

Wildlife Connectivity in Southwestern Washington: Section Manager Gorrell, Wildlife Biologist Lewis and Natural Resource Scientist Buchanan participated in a workshop, on June 18, to identify and discuss appropriate species to include in an assessment of wildlife connectivity within and across the southwestern Washington landscape. Candidates for inclusion had been preliminarily identified and evaluated in two previous stages, and the workshop was convened to select a subset of several species, indicative of key seral stages and supported by adequate data, to be used in the modeling and assessment. The connectivity project involves numerous partners, including Washington State Department of Transportation (WSDOT), United States Forest Service (USFS), United States Fish and Wildlife Service (USFWS) and WDFW. Attendees at the workshop included staff from partner organizations listed above, Port Blakely, Sierra Pacific Industries, and Washington Department of Natural Resources (DNR).

Spotted Owl Conservation: Natural Resource Scientist Buchanan organized and participated in a conference call of a modeling team that recently assessed the value of actual and simulated future spotted owl habitat as part of an incentives-based conservation initiative. The conference call was for the purpose of coordinating efforts, with an emphasis on clarifying the structure and content of a manuscript that will eventually be submitted for publication. Participants include Dan Donato (Washington Department of Natural Resources), Jeff Dunk (Humboldt State University), Karl Halupka (U.S. Fish and Wildlife Service; retired), Gina King (Yakama Nation; retired), Dave LaPlante (Natural Resource Geospatial), Tony Melchiors (Weyerhaeuser Company; retired), Anne Poopatanapong (U.S. Forest Service), Kara Whittaker (Washington Forest Law Center), and Joe Buchanan (WDFW).

2) Providing Recreation Opportunities

Nothing to report this period.

3) Providing Conflict Prevention and Education

Nothing to report this period.

4) Conserving Natural Landscapes

Nothing to report this period.

5) Providing Education and Outreach

Nothing to report this period.

6) Conducting Business Operations and Policy

Nothing to report this period.

7) Other

Nothing to report this period.

GAME DIVISION

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Washington Beaver Relocation Pilot: We have spent the last few weeks making final arrangements for the upcoming training component of the Washington state Beaver Relocation Pilot. This training will cover topics including beaver biology, an overview of the pilot, policy, site and situation assessment (working with landowners), live-capture and handling techniques, annual reporting, and the permit application and conditions. Students will receive a copy of our newly published training manual as a workbook and reference for the duration of the pilot. The manual, compiled by Small Game and Furbearer Biologist West, Small Game and Furbearer Specialist Kindschuh, Statewide Human-Wildlife Conflict Specialist Caldwell, and Wildlife Veterinarian Haman, features a comprehensive synopsis of the training topics along with additional resources and references.

Olympic Mountain goats: Elk Specialist Garrison assisted WDFW Wildlife Program staff members and USFS and National Park Service (NPS) partners in processing and transporting mountain goats from the Olympic Peninsula, where they are not native, to the North Cascades.

For more information regarding this effort visit https://wdfw.wa.gov/news/agencies-begin-second-year-translocating-mountain-goats-olympics-cascades.

Elk management: Elk Specialist Garrison participated in meetings regarding monitoring and management of the North Cascades (NCEH) and North Rainier (NREH) elk herds. WDFW manages elk with the ultimate goal of preserving populations in perpetuity, while also providing sustainable harvest opportunity and a variety of recreational and non-recreational purposes. WDFW and its partners use a variety of sources of information, including population composition and estimates, harvest statistics, and social considerations, to inform management decisions and identify information needs. WDFW and partner biologists will use the above information to formulate management recommendations for the NCEH herd in late summer, and develop plans for monitoring the western component of the NREH by spring 2020.

Treponeme-associated Hoof Disease (TAHD): Elk Specialist Garrison worked with a Washington State University veterinary student on a summer research project investigating risk factors associated with TAHD incidence in Washington. The project is using disease incidence locations, including hunter reporting and WDFW-collected samples, to identify covariates associated disease occurrence.

2) Providing Recreation Opportunities

Nothing to report this period.

3) Providing Conflict Prevention and Education

Nothing to report this period.

4) Conserving Natural Landscapes

Nothing to report this period.

5) Providing Education and Outreach

Treponeme-associated Hoof Disease (TAHD): Elk Specialist Garrison coordinated with the Washington chapter of the Rocky Mountain Elk Foundation (RMEF) to present information about treponeme-associated hoof disease at the Washington RMEF rendezvous in August. Elk Specialist Garrison coordinated with Public Affairs staff members regarding a WDFW digital open house question and answer session on July 17 in southwest Washington. TAHD is a major concern for the public in southwest Washington and WDFW wants to provide the most up-to-date information as possible.

6) Conducting Business Operations and Policy

Nothing to report this period.

7) Other

Nothing to report this period.

HUNTER EDUCATION

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Nothing to report this period.

2) Providing Recreation Opportunities

Master Hunter Permit Program Opens: The Master Hunter Permit Program opened the enrollment period for 2019 on July 1. Applications will be accepted until August 15. Applicants have until May 15 to complete the requirements.

3) Providing Conflict Prevention and Education

Region 5 Coordinator Elliott continues to communicate with a master hunter in Spokane who is completing a cougar taxidermy project for the department. More updates to follow when it is finished and delivered.

4) Conserving Natural Landscapes

Nothing to report this period.

5) Providing Education and Outreach

Region 5 Coordinator Elliott delivered firearms and supplies to an instructor beginning classes at SafeFire Indoor Shooting Range in Camas. Previously there were no classes being offered in that area.

Coordinator Elliott is working with North Country Emergency Medical Service (EMS) to collaborate for their upcoming health and safety fair. A group of four instructors from the area has volunteered and will be present to answer questions, provide firearms safety handouts, and share lists of upcoming local hunter education classes.

Region 4 Coordinator Dazey visited two teaching teams to evaluate their delivery of the hunter education syllabus. Both teams are doing a good job presenting the entire hunter education program to their classes. Since Dazey was already in the Oak Harbor area, he met with and answered questions from a new instructor looking to build an additional teaching team in the area.

Hunter Education Instructor Advisory Committee: Hunter Education Division staff members met to discuss the applicants for the five Hunter Education Instructor Advisory Committee seats. Staff members determined the best candidates for the seats based on their letters of interest. New appointees will start serving on the advisory committee on August 1.

6) Conducting Business Operations and Policy

Regional Coordinator Elliott traveled to Goldendale to hold a pre-service training for four applicants in the area. All were recruited by existing teams and will join those teams in their next classes this summer.

7) Other

Nothing to report this period.

LANDS DIVISION

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Nothing to report this period.

2) Providing Recreation Opportunities

The Lands Showcase was closed out as a biennium initiative as of July 15. This initiative was successful in reaching its stated goals, including a market survey of awareness and attitudes about WDFW lands, a message playbook, pilot application of the message to five land units, facilities inventory collection and database development, social and traditional media, and website content including standard visitor maps. The enterprise data management will live on in a 2019-2021 initiative and the messaging work will be integrated into outreach materials moving forward as a course of standard business.

3) Providing Conflict Prevention and Education

Nothing to report this period.

4) Conserving Natural Landscapes

On July 3, the final Blue Mountains Wildlife Areas Management Plan was submitted to the director for signature!

On July 1, the final approval of edits to the 4-0 Ranch Section 6 Management Plan were approved by USFWS. Patricia Jatczak submitted the final plan to USFWS on July 3.

Cattail Project: The cattail season started and the crew treated Wiley (23.81 ac), Deepwater (7.65 ac), New Deepwater (19.45 ac), Hood Island (four ac) and NAWCA (16.2 ac) with the assistance of Skagit Wildlife Area staff members. The crew removed the old Marshmaster from the field and replaced an alternator.

North Puget Spartina: The crew surveyed and treated *Spartina anglica* (0.0172 ac) outside Fir Island Farm with the Skagit County Weed Board.

Leque Island Sampling: Daniel Zimmerman helped the Skagit River System Cooperative sample for fish on Leque Island as part of pre-restoration monitoring.

Bell Creek and Puyallup Hatchery Weeds: The crew prepared for and helped control weeds at Bell Creek and the Puyallup Hatchery.

Willapa Spartina Eradication: The crew surveyed the Willapa River meadow from Tower Slough toward Johnson Slough and no *Spartina* was located and from Hawks Point to the Cedar River tide gate and dug two plants.

Chehalis River Parrotfeather: Russ Nunez assisted Lauren Kuehne (University of Washington research scientist) treat parrotfeather at several plots to determine herbicide efficacy as part of her research.

Bell Creek Unit Teasel: Dave Heimer met Russ Nunez and Brad Morgan at the Bell Creek Unit (South Puget Sound Wildlife Area) where the crew used a rented tractor to mow approximately an acre at two properties. Teasel is a C-class weed that was selected by the Clallam County Noxious Weed Board for control.

Weed model Brad Morgan poses among the thorny, teasel blooms at Bell Creek (Sequim)

Puyallup Hatchery: Dave Heimer met Brad Morgan at the Puyallup Hatchery where they treated 0.08 acres of invasive knotweed after being contacted by Craig Matson (CAMP). The hatchery is undergoing a major remodel and knotweed was identified by the habitat biologist as a problem that needed treatment.

Brad Morgan sprays invasive knotweed at the Puyallup Hatchery

Sunnyside Quail Habitat Project: Vegetation Ecologist Merg consulted with District Biologist Bernatowicz about an upcoming habitat project on the Sunnyside Wildlife Area to provide native shrub cover especially for quail. The challenge in this project is to get native shrubs established while also competing effectively with infestations of agricultural weeds. Merg suggested some native grasses that can help compete with the weeds, along with other strategies for tilting favor to the desired plant community.

Wooten Wildlife Area Conservation Reserve Program (CRP) Contracts: Vegetation Ecologist Merg visited the CRP field near the Wooten Wildlife Area headquarters to evaluate the habitat value of the stand. The field is typical of CRP and does not offer much of the biological diversity of the surrounding hillsides. Nevertheless, aside from an infestation of the annual grass *Ventenata dubia* that is now ubiquitous in the vicinity the stand seems stable and delivers a modest income each year.

CRP Contract Extensions: Vegetation Ecologist Merg advanced three CRP contracts for one-year extensions. U.S. Department of Agriculture is offering these extensions to bridge the gap until it opens a general signup currently thought to be coming during the final months of this calendar year.

Bureau of Land Management Fuel Break Environmental Impact Statement (EIS) Draft Reviewed: Vegetation Ecologist Merg reviewed a draft EIS for a network of fuel breaks that the Bureau of Land Management is proposing to build throughout the Great Basin. The current draft lacks detail on the cost and benefits of such a network of fuel breaks. Merg forwarded his comments to Habitat Biologist Ritter so that the comments can be included in the WDFW response to the EIS.

L.T. Murray Non-Commercial Thinning Compliance Visits: Foresters Ruggirello and Pfeifle worked with hand-crew chainsaw operators to begin a non-commercial thinning treatment on the L.T. Murray Wildlife Area. The project entails non-commercial thinning of trees under eight inches in diameter. The work includes thinning trees and lopping slash and is designed to accelerate forest growth, improve forest health and resiliency, improve wildlife habitat and reduce the risk of severe wildfire. The project will also generally shift species composition away from invading grand fir, which is overrepresented on much of our land. The project includes 15 units, comprising approximately 953 acres. Forester Ruggirello then did several follow up visits with the crew to ensure that work was being completed to agency standards.

Figure 1: Larch and ponderosa pine are being favored to leave in many of the thinning units on the L.T. Murray Wildlife Area. The extra space given to individuals of these species with the removal of true fir, Douglas fir, and lodgepole pine should increase the size and prevalence of larch and ponderosa pine in these forested stands.

Stemilt Restoration Thinning Compliance Visits: Thinning operations on the Stemilt Forest Health Project outside of Wenatchee continue. Years of planning and prep work have culminated in the commencement of ground-based, thinning operations. The treatment is being carried out on WDFW and Chelan County land. Following a "leave-tree prescription," the harvesting contractor will not cut trees marked in orange. The anticipated end result of this treatment will be more open forest conditions less likely to carry the spread of crown fire. These conditions also

promote greater vigor and thus resiliency in residual trees to drought, insect, and pathogen related stresses. The project also opens up the forest floor for substantial regeneration of understory vegetation for browsing ungulates. The Wenatchee Valley was moved into a partial machinery shutdown by DNR due to heightened Industrial Fire Precaution Levels. Tree cutting will not be allowed after 1:00 pm. Forester Ruggirello reminded the harvester of this and ensured that work was being done to WDFW standards. Early in the treatment, the forest is already more open and less uniform. These conditions will increase fire and pathogen resistance on our treated land, while eventually increasing browse for ungulates.

Figures 2 – 3: Untreated (top) and treated (bottom) photos show the immediate impact forest health operations have on opening up the forest, reducing tree density, and improving fire resiliency within a stand of trees.

Figure 4: Operator-created snags are dispersed throughout the project area to provide future habitat for cavity-nesting birds.

5) Providing Education and Outreach

Legislative Tour at Sherman Creek: In July 2019, the House of Rural Development, Agriculture, and Natural Resources Committee met at the Sherman Creek headquarters to discuss forest heath and wildlife issues. The tour started by looking at prescribed burning and how the 2018 Boydes fire interfaced with the burn. In that situation, the fire behavior changed dramatically when it burned into the previously burned area allowing fire fighters to attack quickly and directly with the wildfire. In result, minimal damage occurred in the previously burned area. Representative Joel Kretz and Senator Shelly Short praised the work DFW has accomplished. The tour moved up to the top of Bolder Pass to look at damage from the 2015 wildfires. At this location less forest maintenance was done and thousands of acres were completed devastated.

Region Two Habitat Staff Field Visit to the Stemilt: Mr. Heimburg from WDFW's forest practices division in Olympia and foresters Ruggirello and Mize hosted a field tour of the Stemilt restoration operation. Habitat Program staff members from region two were present, as the group discussed the scientific and historical basis for our agency's forest health treatments. The group visited different forested sites in the Stemilt Basin outside of Wenatchee. Stops included visits to areas of untreated forest soon to be thinned by WDFW contractors, recently clear-cut parcels previously owned by private industry, and a section thinned by DNR within the last 10 years. The group also stopped at WDFW's logging operation in the Stemilt to gain a better understanding of active logging operations. Through the field trip, the forestry group hopes that regional habitat staff will better understand the differences between WDFW's restoration forestry work and other forest management options. There is a mutual desire between both Habitat and Wildlife Program staff members for our forest restoration treatments to be a more collaborative, intra-agency processes.

Figure 5: Habitat Program staff observe a rubber-tired feller-buncher opening up the forest in WDFW's Stemilt Restoration Project. Modern logging operations are highly mechanized and technical. A shortage of skilled contractors makes it difficult to find capable loggers to do restoration work. Coupled with poor log prices and long hauls to mills, forest restoration treatments often depend heavily on state and federal aid.

Soda Springs Fuel Break Maintenance: The forest management program provided funding for Klickitat Wildlife Area Assistant Manager Stevens to hire a contractor to refresh roadside fuel breaks. The fuel breaks were originally established in 2013 as part of a community wildfire protection plan. They help prevent a large fire from harming nearby homes and protect western gray squirrel habitat until it can be treated.

Figure 6: Roadside vegetation before and after treatment.

6) Conducting Business Operations and Policy

Bonneville Power Administration-funded Wildlife Area Spending Plan for 2020: Vegetation Ecologist Merg began to develop a proposal for allocating a modest increase in 2020 Operations and Maintenance funding on wildlife areas enrolled in Bonneville Power's mitigation program. This is a multi-factor optimization problem that will require input from each affected wildlife area, and from Lands Program leadership. Ideally, it also requires clarifying how much of each of the enrolled wildlife areas was purchased with Bonneville Power Administration funds.

7) Other

Regional Meetings to Recognize the Good Work of WDFW Employees: During the week of July 8, WDFW regions on the east side of the state met to acknowledge the great work employees have done over the past year. This was a great opportunity for the prescribed fire program to meet others in other regions and discuss future work. It is amazing to see just how much is accomplished and how dedicated folks are.

Contract Reports and Billing: Dave Heimer completed reports and associated billing for contracts from USFWS, RCO, WSU and Ecology at the close of the biennium. Also reviewed the DNR receivable contract for Lake Terrell that will be used as match for an Ecology grant.

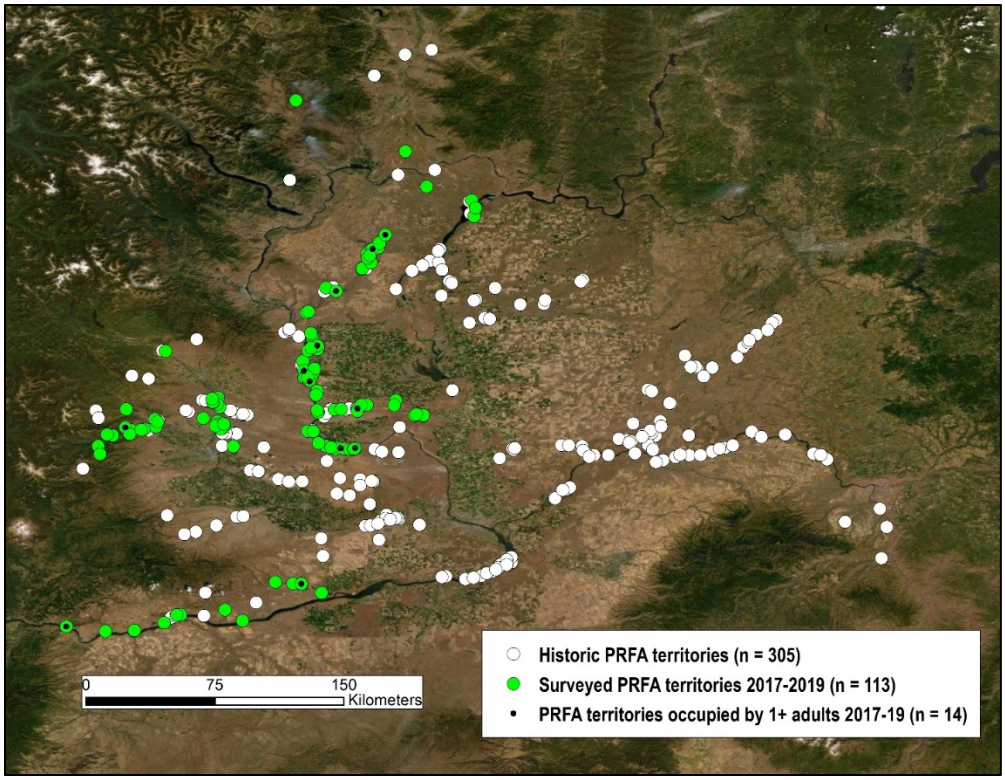
SCIENCE DIVISION

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

WDFW Research Scientist Michael Schroeder and Wildlife Biologist Derek Stinson attended a status assessment meeting at the U.S. Fish and Wildlife Service (USFWS) office in Lacey for the Mount Rainier subspecies of white-tailed ptarmigan, *Lagopus leucura rainierensis*. The USFWS was petitioned to list the ptarmigan as either threatened or endangered, largely as a consequence of climate change. Michael gave two presentations, one on the natural history of white-tailed ptarmigan and the other on recent work on genetics. The USFWS will likely reach a listing decision in early 2020.

Research Scientist Watson summarized results of prairie falcon surveys conducted by six volunteers at historic falcon territories in eastern Washington. This was the third year for surveys. Territory occupancy continued to be very low, with one or two adult falcons present ≥1 year at only 12 percent of 113 territories. We hope to expand the surveys next year to more inaccessible sites along the Snake River where there were comparatively high historic nest densities.



2) Providing Recreation Opportunities

Nothing to report this period.

3) Providing Conflict Prevention and Education

Nothing to report this period.

4) Conserving Natural Landscapes

Nothing to report this period.

5) Providing Education and Outreach

WDFW Research Scientist Michael Schroeder co-authored a paper titled "Sickle-shaped primaries and tail feathers involved in sound production in Siberian grouse *Falcipennis falcipennis* Hartlaub 1855" in the German journal Ornithologischer Anzeiger (volume 58:48–52). The Siberian grouse is a close relative of the spruce grouse in Washington State and Mike provided important information on comparative behavior. The senior author was Siegfried Klaus.

6) Conducting Business Operations and Policy

Nothing to report this period.

7) Other

Nothing to report this period.

REGION 1

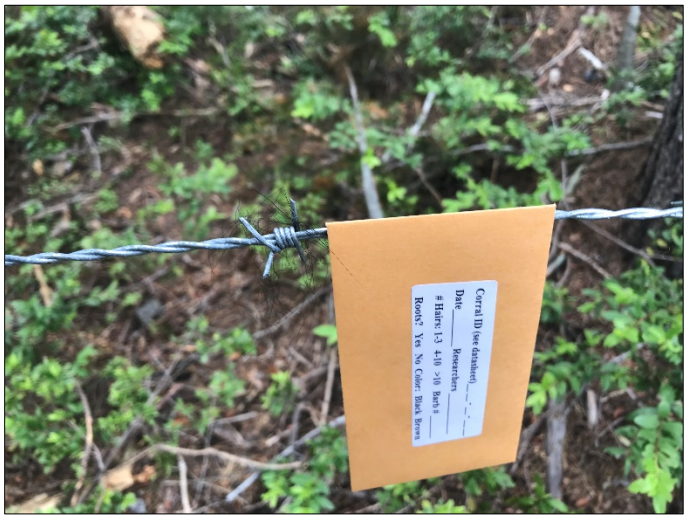
1) Managing Wildlife Populations

Black Bear Hair Snare Project: Wildlife Biologists Atamian and Lowe assisted District 1 biologists with the black bear hair snare corral project, checking seven of the corrals during the second round of sampling. Thirty six corrals were put up in early June, lure and cameras were deployed the week following the close of the spring bear season and four rounds of sampling will occur prior to August 1 when the fall season opens.

Sow and two cubs entering the hair snare corral

Sow and two cubs checking out the lure pile

Wildlife Biologist Lowe checking for hair on the barbwire surrounding the lure pile



Hair sample left behind on the barbwire and sample envelope

Biologists Wrangle Hairs Not Bears with Corrals: WDFW Region 1 staff members have been coordinating a survey effort for black bears since early June. Biologists will use the information gathered to better understand how black bears use the habitat available in GMU 117 and to estimate how many bears there might be in that GMU. The process involves surrounding a 12-foot-by-12-foot area with two strands of barbed wire and then placing a pile of rotten wood in the middle. Upon the pile of wood, WDFW personnel pour a lure consisting of a 2:1 ratio of cow's blood and fish oil. The bouquet of smells created by this mixture will lure bears to the site and most of the time the bear cannot resist crossing through the barbed wire to roll in all the good smells. The corrals are out in the same spot for almost two months and WDFW staff members check each corral every 10 to 14 days to collect hairs left behind by the bears and also to freshen up the stink. When WDFW personnel arrive at each site they begin by placing pre-labeled coin envelopes at each barb where there is hair and then they go around and collect the hair and label each envelope by the barb. These envelopes are then sent to our neighbor to the north (Canada) to identify individual bears by their hairs and start the process of estimating how many bears could be in the area.

WDFW staff members from Region 1 are trained by Cougar and Bear Specialist Beausoleil on how to properly setup a hair corral

Pouring the lure for 36 hair corrals, not pictured is the smell and the flies

A bear intent on the bouquet of smells is unaware that it is leaving its hair for biologists to collect at a later date

Envelopes placed on the barbed wire where hair was observed, not pictured are the mosquitoes

Bat Maternity Colony Exit Counts: Wildlife Biologists Atamian and Lowe with Habitat Biologist King and Conflict Specialist Westerman completed this year's pair of bat maternity colony exit count on the Little Spokane bat condo. This monitoring is a key part of WDFW White-nose syndrome (WNS) management plan, since we do not know where our winter hibernacula are located, we are instead monitoring our larger known maternity roosts for declines that would indicate potential WNS occurring in the winter hibernacula.

Biologists Atamian, Lowe, King, and Westerman preparing for the little Spokane bat exit count

Blurry image of a bat exiting the condo and flying directly at Westerman

Three bats exiting the condo far corner and flying away

Annual Canada Goose Banding: Wildlife Biologist Lowe, Wildlife Conflict Specialist Westerman, Natural Resource Technician Fish, Officer Spurbeck, and several volunteers worked with Waterfowl Specialist Wilson to trap and band Canada geese on three lakes in Spokane County. The geese molt their flight feathers for a period during the summer, allowing the crew to corral adults and goslings to be banded and released. Approximately 150 geese were trapped in one day this year, including 12 birds that had bands from previous years.

Canada geese rounded up on Silver Lake for banding

One of our experienced volunteers holds a young Canada goose while Wildlife Conflict Specialist Westerman attaches a leg band

2) Providing Recreation Opportunities

Parking area construction: On July 9, The WDFW construction crew out of Lacey started building the parking lot for the recent addition to Reardan Audubon Ponds Wildlife Area. Wildlife Area Assistant Manager Mike Finch assisted the crew in securing road signs for passing traffic, and water for the actual construction needs. Construction should be completed by the end of July.

Facilities Inventory, Lands Showcase: Access Manager Daniel Dziekan joined forces with Statewide Access Coordinator Shane Belson and others from different regions to update the facility inventory at water access sites around the state. Dziekan focused on his site in north Region 1. He used an online tool to mark spots on a map that signify facilities on water access sites; boat launches, hand launches, restrooms, parking areas, kiosks/entrance signs, and fishing piers. This data is uploaded onto the WDFW LIS program, and will also be used to populate information on the WDFW water access webpage.

Site example for water access webpage update

Private Lands Access Program Signage: Private Lands Biologist Gaston and Natural Resource Worker Fish checked on properties enrolled in WDFW Private Lands Access program and posted new signs as needed for any properties needing additional signage. A new property enrolled in the Hunt by Written Permission program was also posted with signs.

A photo of the new Hunt by Written Permission property in Spokane County

3) Providing Conflict Prevention and Education

Raccoon Attack: Wildlife Conflict Specialist Westerman set a trap in Pullman after a raccoon attacked a dog and its owner (who had to go through rabies vaccination after the attack). The raccoons have not been trapped and have possibly moved out of the area for the time. Fish and Wildlife Officer Silver assisted in moving the trap to try to catch the raccoons.

Grouse Flat Depredation Investigations: WDFW Wildlife Conflict Section staff members received a report of a possible depredated calf in the Grande Ronde/Grouse Flat area. WDFW Wildlife Conflict Section staff members coordinated with WDFW Enforcement personnel and the livestock producers to investigate the possible depredation. A complete field necropsy was performed by Conflict Section and Enforcement staff and it was determined that the depredation was confirmed wolf. The second report was of a steer that had injuries to its tail and hind end. WDFW Wildlife Conflict and Enforcement personnel responded to and investigated the report and determined that the injuries came from an unknown predator.

Depredated heifer calf

Depredation Investigation: Wildlife Conflict Specialist Weatherman, Enforcement Officer King and Ferry/Stevens County Wildlife Specialist investigated a deceased adult cow located on a USFS grazing allotment in Ferry County. At the completion of the examination, it was determined to be a confirmed wolf attack.

4) Conserving Natural Areas

Nothing to report this period.

5) Providing Education and Outreach

Public Contacts: Biologist Baarstad responded to two calls received outside of normal work hours from residents in the Spokane and Ritzville areas concerned about hatchling birds that had fallen out of nests. Baarstad advised each homeowner as appropriate and thanked them for the contact.

Legislative Tour: Supervisor McCanna attended and participated on the legislative tour in northeast Washington covering timber harvest, prescribed fire, Predator-Prey Project and wolf activities.

Wolf Data Sharing Committee Meeting: Supervisor McCanna facilitated the third wolf data sharing committee meeting in Spokane. Feedback was shared by committee members from their represented groups. Next steps were discussed and further outreach is needed prior to the next meeting. GIS Specialist Whalen reviewed the quick start tab and how to use this function. Whalen and McCanna completed a tutorial, which will be sent to all data sharing users helping to explain this tool.

6) Conducting Business Operations and Policy

Annual Awards Meeting: This year three northeast Washington wildlife area/access complex staff members won regional awards. Access Manager Daniel Dziekan was one of many to receive the Karin Divens Conservation Through Collaboration Award, for his help with the

ongoing Predator-Prey Project in northeast Washington, trapping and collaring white-tail deer. Natural Resources Technician Jerry Christensen was chosen for the Esprit de Corps award for his enthusiasm in working at Sherman Creek Wildlife Area, and Wildlife Area Assistant Manager Daro Palmer was selected for the Leadership award. Congratulations to them all!

Administrative: Supervisor McCanna worked on end of the month/fiscal year closeout.

Regional Awards Meeting: Supervisor McCanna attended the Region 1 awards meeting receiving his 25 year pin for service.

Wildlife Conflict Specialists Interviews: Regional Wildlife Program Manager Robinette, Producer Nelson, WDFW Officer Parkert, Ferry County Sheriff Maycumber and Supervisor McCanna conducted interviews of the top five candidates for the permanent Wildlife Conflict Specialist position in District 1.

7) Other

Nothing to report this period.

REGION 2

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Northern Leopard Frogs: Biologists Grabowsky, Dougherty, and Hughes visited the Columbia National Wildlife Refuge to begin construction on the soft release enclosure that will be used for the metamorph northern leopard frogs (currently being raised at Oregon Zoo and Washington State University) when they are ready for release. These enclosures will allow the young frogs to acclimate to the reintroduction site while protected from predators. These enclosures should also reduce the likelihood of the frogs immediately dispersing from the release site upon release.

Soft release enclosure for northern leopard frog metamorphs - Photo by Emily Grabowsky

Over the last few weeks, Biologist Grabowsky and other WDFW biologist have been preparing for a large-scale northern leopard frog survey at Columbia Basin Wildlife Area. A large survey effort was completed in 2014, from which important population structure and occupancy data was collected. WDFW will replicate that survey in August 2019 to determine the current status of frog populations near Potholes Reservoir. Volunteers will be a vital part of this effort from August 16-25 please see the photo below for survey information and contact Biologist Grabowsky for more information.

2019 northern leopard frog survey information - Photo by Emily Grabowsky

Pygmy Rabbit Kit Release Effort: Our team continues to focus on relocating kits to the wild. The goal of this effort is to relocate kits (both from the wild population and breeding enclosures) to release sites within Beezley Hills and Burton Draw recovery areas to establish new populations. Coordinator Gallie, Biologist Zinke, Interns Beall, Houghton, and Berryman and staff members from the Wells Wildlife Area have conducted the capture/relocation efforts. Thus far, 34 kits have been relocated to release pens in the wild (30 enclosure born and four wild translocations). Fourteen kits have gone to the Beezley Hills site and 20 kits to Burton Draw.

A wild-caught pygmy rabbit kit captured on the Sagebrush Flat Wildlife Area – Photo by J. Gallie

Sunrise in Moses Coulee – Photo by J. Gallie

Duck Brood Surveys: Biologist Rowan completed a few duck brood surveys, which are used as an indicator of local production trends. Brood numbers were higher than last year in half of routes and lower than last year in the other half of routes.

Mourning Dove Banding: Biologist Rowan purchased bait, began pre-baiting capture sites, and scouted for trapping new sites. Doves are scattered in very small numbers at most locations, and are not consuming the bait, which will be a problem for captures.

Grebe Surveys: Specialist McPherson and Manager Eidson conducted year two of surveying nesting grebes on Potholes Reservoir. Water levels this year were higher than last year during nesting season. The higher water levels seemed to concentrate nesting efforts in one large area where there were around 200 grebe nesting in close proximity to the main Crab Creek channel. There was much less grebe activity in the Job Corp Dike area, some grebes were observed but no indication of nesting yet.

Specialist McPherson also went to Winchester Lake to investigate if any nesting was occurring but no nest were located and Specialist McPherson only observed two adult grebes.

Grebes nesting along the main channel of Crab Creek - Photo by C. McPherson

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

Carter Mountain: The Okanogan Valley Chapter of the Backcountry Horsemen secured funding to replace a wire stretch gate with a new pipe gate. They installed new pipe anchor points on each side of the gate along with an easy latch that will make it easier for the trail users to open and close the gates on this section of trail. The Chapter also installed a third rail on a portion of fence around the parking lot at the Carter Mountain access. Now the fence around the parking lot looks uniform. Thank you to the Okanogan Valley Chapter of the Backcountry Horseman for their constant willingness to help with projects on the many units of the Sinlahekin Wildlife Area.

New Gate installed along Carter two-track used by the public - Photo by Wehmeyer

Volunteers from the local Backcountry Horsemen – Photo by Wehmeyer

Hunter Access: Private Lands Biologist Braaten spent part of the last two weeks maintaining faded hunter access signs and labels. Private Lands Biologist Braaten met with cooperating landowners and provided hunting permission slip booklets for upcoming hunting seasons. Private Lands Biologist Braaten also received several call from hunters inquiring about hunting access on private lands or special permit hunts and access.

Private Lands Hunter Access Sign Maintenance - Photo by Eric Braaten, WDFW

Pheasant Surrogator: A surrogator is a self-contained unit used to raise and protect game bird chicks**.** Lands Operations Manager Finger worked with volunteers Dick Price from Columbia Basin Pheasants Forever chapter and Ron Balzer of Wenatchee Sportsman's Association, as well as Wildlife Area Manager Fox and Acting District Biologist Comstock to install a surrogator in Swakane Canyon. Thus far, it's largely a trial and error experiment but operations are improving and we've learned from our mistakes and will be able to hit the ground running next year.

Billy Clapp Lake boat launch proposal: Lands Operations Manager Finger and Bureau of Reclamation Field Office Manager Maynard responded to an opportunity to video and observe an emergency water release of 7,300 cfs over summer falls. The release was due to a substation failure on the west side of the mountains, an event that occurs once or twice a year. The amount of water diverted over Summer Falls may range from around 5,000 to 10,000 cfs depending on power demand (which influences amount of water delivered through the canal) at the time of the outage. The opportunity was timely because Finger is working with Access Manager Harmon, Columbia Basin Hydropower, and Bureau of Reclamation to assess risk associated with a potential boat launch in this location. Finger was unsuccessfully attempting to coordinate a planned release for 2019 and had decided to reschedule for 2020 to make sure we can accommodate all the necessary staff. This was a good opportunity for a sneak preview and give some ideas on how we might set up monitoring efforts for the 2020 planned release.

3) Providing Conflict Prevention and Education

Highway 97A Fence Repair: Specialist Bridges finalized the coordination of repairs to the Highway 97 deer and big horn sheep fence that was damaged this spring between Entiat and Wenatchee when large rocks broke loose and crashed through the fence. The fence has proven to be an effective barrier keeping sheep and deer off the highway, lowering the number of automobile/animal crashes, and improving safety. Four local groups have committed to collaboratively working together to maintain the fence as necessary and have been doing so for several years. The groups provided financial support for the work and include the Wild Sheep Foundation ($2,500), the Wenatchee Sportsman's Association ($2,320), Department of Fish and Wildlife ($5,000), and Department of Transportation ($4,461).

Damage section of Highway 97A fence from rock fall before repair - Photo Joe Bridges, WDFW

Repaired section of Highway 97A fence - Photo Joe Bridges, WDFW

Bear Education: Specialist Heilhecker spoke to a resident in Winthrop regarding a bear that was making routine, weekly visits to garbage cans. The homeowner has scrubbed the garbage cans, only throws paper products in the cans and stores food waste in the freezer until it is time to haul the garbage. Specialist Heilhecker suggested installing an electric fence around the garbage cans.

Range Rider Coordination and Landowner Education: Specialist Heilhecker coordinated with Tonasket Ranger District and WDFW contracted range riders regarding livestock and wolf activity within the Loup Loup territory. Specialist Heilhecker also updated Methow Valley

Ranger District staff members regarding the Lookout pack locations. Specialist Heilhecker spoke to a couple of landowners within the Beaver Creek territory and provided updated location information.

4) Conserving Natural Landscapes

Methow Forest Restoration Phase 2: Recently, the Ramsey Creek commercial thinning portion of the Methow Forest Restoration Phase II project finished. Overall, 247 acres in the Ramsey Creek drainage were treated. The post-harvest results closely reflect the forest's historic range of variability. To accomplish this, stocking levels were reduced to approximately 25 to 35 trees per acre depending on site moisture and availability. The thinning prescription enacted was devised from the Individual, Clumps, and Openings technique, which the wildlife area previously implemented in the Bear Creek Unit. With the thinning component now complete, the next step will be treating the area via prescribed fire, hopefully in the spring of 2020. Upon completion, the Ramsey Creek forest should provide improved habitat for a wide array of wildlife accompanied by improved ecological integrity ratings throughout the site.
Ramsey Creek commercial thinning final tally:

- 351 total loads to three mills in Darrington, Randle, and Cle Elum, Washington.
- All loads delivered from May 16 – June 24 (27 working days) = Avg. 13 loads / day.
- 247 acres treated at a cost of $161.08 / acre. Cost includes timber harvest and haul, all roadwork, fire line construction, and gate installations.

Untreated, overstocked forest adjacent to Ramsey Forest Health Project (left). Commercially thinned forest in the Ramsey Creek drainage. Rx fire to follow in one to two years (right) – Photos by Troyer

Pygmy Rabbit Safe Harbor: Biologist Hughes met with a landowner to fill out their permit application and go over their site plan. This is a transfer, taking place for 1576 acres in Douglas County. The new landowner was interested in keeping the ground enrolled in safe harbor with the same agreement the previous landowner had the property enrolled in. Hughes forwarded all application materials to the USFWS for the permit transfer.

Habitat Restoration: Biologist Hughes met with a landowner to evaluate two habitat plots that were seeded with warm season grasses early June. Grasses are coming in to both plots. Hughes discussed herbicide mixes with the landowner, who will be treating each plot for broadleaves this week. Both of these plots were partnered projects between WDFW, Columbia Basin Pheasants Forever Chapter, and the Grant County Conservation District.

Grasses coming in to plot Hughes seeded in June - Photo by Hughes

REGION 3

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Dove Banding Underway: District 4 Wildlife Biologist Fidorra, along with biologists across the county, began dove banding this month for nationwide efforts to band mourning doves to track harvest, movements, and population dynamics. Fidorra began trapping at two new sites this year with mixed success.

The first mourning dove banded for the year. The pale featheredges giving the bird a scaled look indicate it is a juvenile hatched this season.

Deer in Canal: Wildlife Conflict Specialist Hand responded on two occasions to the Esquatzel Canal north of Pasco after deer were reported trapped. The first call out the canal water level was lowered was sometime during the early morning hours and the deer was presumed to have escaped. On the second call out a healthy doe deer was located and successfully removed from the canal by lowering the bypass gate and hazing the deer out the end of the canal into the Columbia River. These were the fifth and sixth incidents with deer at this location this year.

Deer Trapped in the Esquatzel Canal

District 8 Wildlife Biologist Bernatowicz checked two tube-transects to survey for western gray squirrels in Klickitat County. Bears ate all the walnuts and moved 10 of 12 tubes on one transect. Bears only hit two tubes on the second transect, but no loose walnuts could be found, probably due to Douglas squirrels. After rebaiting the transect, Biologist Bernatowicz walked by one tube 90 minutes later and found all the loose bait was gone.

Western gray squirrel hair sampling tubes "hit" by a bear

District 8 Wildlife Biologist Bernatowicz trapped mourning doves two evenings and one morning. Only four doves were captured, one of those was already banded. It appears that the dove population is very low this year and significant effort may be required to reach quotas. Luckily, a Yakima Training Center (YTC) biologist contacted Biologist Bernatowicz about the possibility of banding doves on YTC. Bernatowicz provided bait and trapping supplies to YTC. Baiting is currently ongoing at four sites in the district.

2) Providing Recreation Opportunities

L.T. Murray Wildlife Area Manager Babik printed, laminated, and hung all emergency restrictions signs at the 14 access points on the L.T. Murray, Quilomene, Whiskey Dick, and Teanaway Valley Units.

Kiosk at Teanaway Valley Unit with emergency restrictions sign

3) Providing Conflict Prevention and Education

Damage Prevention Permit Issuance: District 4 Wildlife Conflict Specialist Hand continued to prepare and deliver Damage Prevention Permits to landowners in the Corral Canyon elk area to address elk damage in dryland wheat and irrigated tree fruit and row crops near Rattlesnake Mountain.

Rattlesnake Mountain Hazing: District 4 Wildlife Conflict Specialist Hand continued to haze problem elk from several winter wheat fields mostly after dark and into the early morning hours.

Plymouth Area Deer Hazing: District 4 Wildlife Conflict Specialist Hand conducted hazing of deer in several blocks of wine grape vineyards in the Plymouth area. Deer damage and overall activity near these crops has declined recently, mostly due to non-lethal hazing techniques and moderate summer weather conditions.

District 4 Wildlife Conflict Specialist Hand maintained a trail camera set along a popular elk travel route on Rattlesnake Mountain to monitor elk activity leaving Hanford for winter wheat fields. Over 400 images of mostly nocturnal raids by elk were captured.

4) Conserving Natural Landscapes

L.T. Murray Fire: The L.T. Murray had a 75-acre fire over the Independence Day weekend as a result of a lightning strike on July 3. DNR was able to quickly contain the fire despite heavy winds. The fire burned in a natural mosaic pattern, but staff members will need to address the dozer line that surrounds the 75 acres.


Aerial asult on the 75 acre fire in the L.T. Murray


Mosaic burn in the L.T. Murray

Unfortunate casualty of the fire – baby rattlesnake

Oak Creek Wildlife Area staff members continue to spray for noxious weeds on the wildlife area. Targeted species are primarily nuisance weeds such as kochia and puncturevine.

Oak Creek Wildlife Area Forester Hartmann revisited long-term photo monitoring points associated with the Milk Creek Pre-Commercial Thin Project completed in June, and collected fuels data for fall slash burning. WDFW's emergency restriction signs were posted across Rock Creek's information kiosks.

Pre and post treatment photos from one of seven long term monitoring photo points associated with Milk Creek Pre-Commercial Thin Project. Continued visits at 5 to 10 year intervals will track stand progression over time, and help direct future management actions.

Logging work started this week in the Stemilt Basin portion of the Colockum Wildlife Area. This project is a cooperative effort with Chelan County and the Stemilt Partnership to reduce forest fuels and improve habitat. Approximately 350 acres of overstocked ponderosa pine forest will be thinned, and work should be completed by mid-October. Other work in this same area includes installation of vehicle gates on non-green dot roads, improving compliance with the green dot road system. The combination of opening up these dense forest stands to improve big game forage conditions while reducing disturbance by illegal vehicle use should be a great combination for wildlife and sportsman.

A machine processes logs on Colockum Wildlife Area. Note the dense forest behind the machine.

A skidder moves logs to a landing on Colockum Wildlife Area

Logs being loaded onto a truck, Colockum Wildlife Area

Sunnyside Wildlife Area Manager Kaelber and Natural Resource Technicians Rodgers and Wascisin discovered a healthy population of biocontrol beetles (*Galerucella pusilla)* foraging on purple loosestrife located at the Mesa Unit. In past years, wildlife area staff members have released these same beetles to control the spread of purple loosestrife throughout the wildlife area. Now it appears that the beetles are doing a great job, which means less spraying of herbicides.

Biocontrol beetles foraging on purple loosestrife

A recently discovered infestation of yellow star thistle near the Rattlesnake Slope Unit access site. Natural Resource Technician Rodgers applied herbicide to prevent any spread of this invasive weed. The site will be monitored and possibly hand pulled if the herbicide is not effective.

Yellow star thistle at Rattlesnake Slope

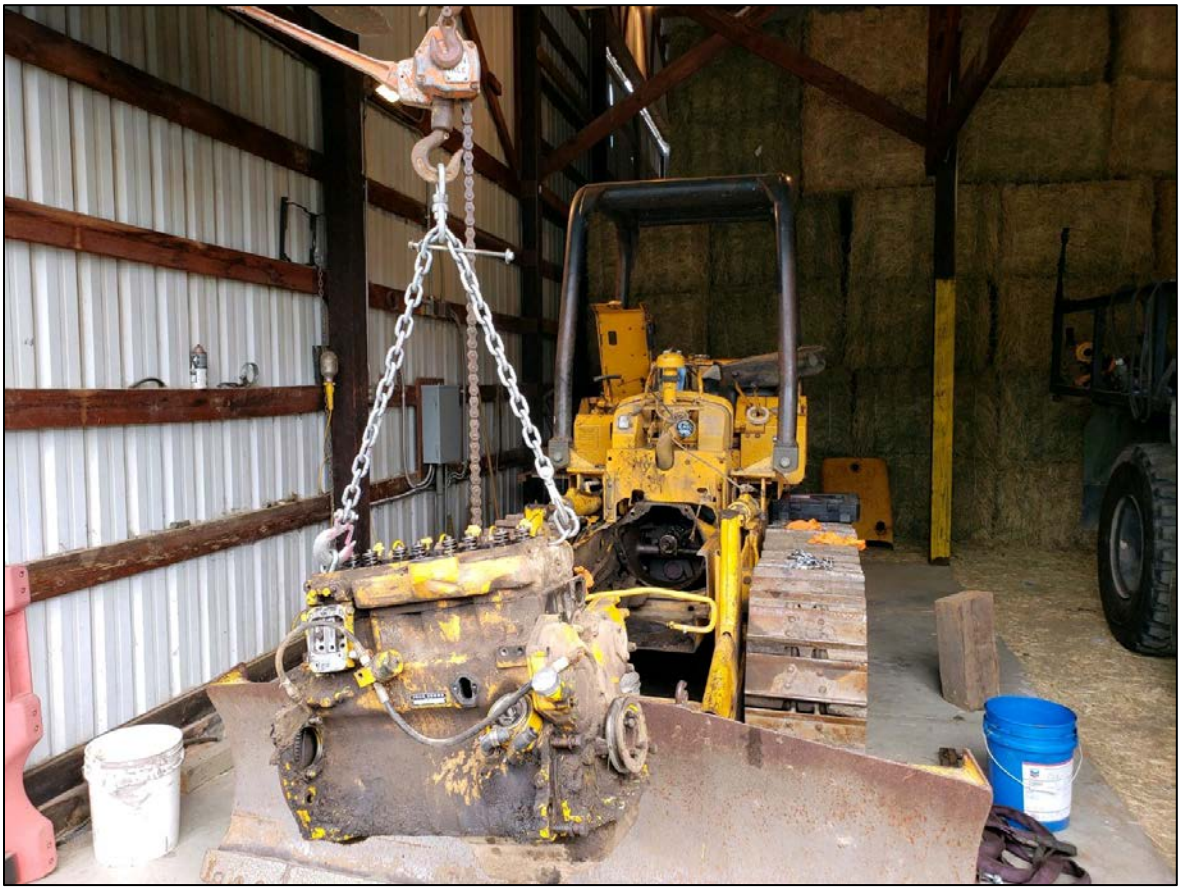
5) Providing Education and Outreach

Tri-Cities Volunteer Receives Department Award: District 4 Wildlife Biologist Fidorra and Sunnyside Wildlife Area Manager Kaelber nominated local Richland Rod and Gun Club volunteer Larry Martin for the Regional Volunteer of the Year award, which he received on July 10 from the WDFW director in Selah. Larry has contributed over 35 years to habitat and wildlife enhancement through shrub planting, guzzler maintenance, and various WDFW surveys and research projects. It was a long overdue recognition for all Larry does for the department, and the

wildlife of Washington. Fidorra also submitted the award information to the Tri-City Herald Newspaper, which covered the story https://www.tri-cityherald.com/sports/outdoors/article232503202.html

6) Conducting Business Operations and Policy

Assistant Manager Berry performed maintenance on a John Deere 450 Crawler tractor. Berry able to remove engine and will get parts swapped over to remanufactured block in coming days.



Old engine out and lots of work to be done

7) Other

Nothing for this installment.

REGION 4

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Mountain Goat Release: Biologists are busy translocating mountain goats from the Olympic Peninsula into the Cascade Range.

Biologist Mike Smith with a kid mountain goat

Canada Goose Banding: District Biologist C. Moore, Private Lands Access Technicians Otto and Deyo, and several WDFW Enforcement personnel assisted Statewide Waterfowl Specialist Wilson with Canada goose banding at two sites in Whatcom County. All adult waterfowl undergo a molt of their flight feathers, which makes them flightless a few weeks each year. This allows biologists to capture adult and recently hatched geese. Once geese are captured, each bird is aged, their gender is determined, and a metal band with a unique number is affixed to their leg. All data recorded is submitted to the bird-banding laboratory. Information obtained from recoveries of marked birds is used to monitor the status and trends of resident and migratory bird populations. A total of 240 birds were banded in District 14 this year.

Wildlife and Enforcement Program staff members working together to secure a fence enclosure preceding goose banding

Biologist C. Moore teaches a few young volunteers (left) about how feathers grow on birds, and then they got to release a few of the banded birds (right; Photo credit: Ryan Valentine)

Band-tailed Pigeon Mineral Site Survey: As part of a greater effort throughout the Pacific Flyway, District Biologist C. Moore conducted band-tailed pigeon surveys in Whatcom and Skagit counties. Pacific Coast band-tailed pigeons use natural mineral springs to supplement their diet of berries, which contain few minerals. These minerals are important sources of sodium and possibly calcium, which are essential during the nesting season for egg production. Results of this annual survey are used to inform the band-tailed pigeon harvest management framework.

White-nose Syndrome Monitoring/Bat Management: Biologist Anderson surveyed newly reported bat colonies to confirm status. One colony in a house has around 900 Yuma *myotis*. A barn has about 150 Yuma *myotis*. Biologist Anderson and volunteers with Bats Northwest surveyed three known maternity colonies in the area for annual occupancy.

2) Providing Recreation Opportunities

Nothing for this reporting period.

3) Providing Conflict Prevention and Education

Bear Release Education: Biologist Anderson received word from a local contact that drops information now and then. Their question was "what is going on here?"

The answer was a bear release. The bear was getting a bit "less bear" while hanging around for some time in a local city on Lake Washington. A bit too urban a situation and, more importantly as bears find their way in/out of our more urban areas more often than one would think (they just keep to themselves if they are being "bear") – it was starting to habituate too much. Please clean up attractants – do not leave food out, put trash out day of with a secure canister; see here: https://wdfw.wa.gov/species-habitats/species/ursus-americanus. Report any bear sightings as outlined here: https://wdfw.wa.gov/species-habitats/living/dangerous-wildlife.

Merlin Nest Permitting: Biologist Anderson received a call from concerned researchers that have been following area merlin falcon pairs. A pair located in Seattle (with four chicks) are located in the very top of a tree that was being taken down, regardless of status of the nest and birds. The chicks were not all fledged. The owner and neighbor all fully admitted they knew of the birds, nest, and chicks. Dive-bombing falcons are a pretty good clue that something is up. Anderson contacted Officer Stevens and swung into the site while on way to survey elsewhere. The property owner was asked to stop and the need for a nest destruction permit (once the young had fully fledged) was outlined. Anderson will be working with the property owner to provide for fledging needs of the protected wildlife and then destruction of the nest (and tree) when there is no risk of take of state wildlife.

Merlin nest in top of recently limbed-up tree

4) Conserving Natural Landscapes

Nothing for this reporting period.

5) Providing Education and Outreach

Elementary School Outreach: Biologist Anderson provided outreach on bats and other mammals to a group of 70 elementary aged students studying local wildlife.

Biologist Anderson shows a black bear hide to elementary students

6) Conducting Business Operations and Policy

Nothing for this reporting period.

7) Other

Nothing for this reporting period.

REGION 5

1) Managing Wildlife Populations

Western Gray Squirrel Statewide Survey: Over the past two weeks, Wildlife Biologists Wickhem and Bergh and Habitat Biologist Johnson performed their first checks of their western gray squirrel transects that were deployed in mid-June. Each transect consists of 12 PVC tubes with a walnut glued into each tube, and plates with double-sided tape at each tube entrance. When a squirrel enters the tube to investigate the walnut, it leaves hair behind on the double-sided tape. The hair is used to identify the species of squirrel. After this first round of checks, three sites had potential western gray squirrel hair. The samples were sent to Olympia for final confirmation. The transects will be checked twice more over the next six weeks. The team has 60 transects to complete in Klickitat County by the end of next summer. The results of this study will advise the periodic status review of this state threatened species. For more information about western gray squirrels, please visit: https://wdfw.wa.gov/species-habitats/species/sciurus-griseus. In addition, Manager Van Leuven and Assistant Manager Steveson set up a transect on the Soda Springs Unit of the Klickitat Wildlife Area, as part of this multi-year study that is being done to determine the range of western gray squirrels in Washington.

A squirrel dig, with a partially eaten truffle found

Set and baited squirrel tube along a transect. A good sign that the site is occupied by western gray squirrels

Western Pond Turtle Media Day: Jason Wettstein of the Public Affairs department organized a turtle media day while Biologist Bergh checked turtle traps. The trapping effort this week and next will focus on finding turtles with shell disease to send to the Oregon Zoo where they will undergo treatment. Three newspaper reporters came out to the Sondino site to see the work being done and learn about turtles and shell disease.

Photos and videos were put on WDFW's social media account and The Columbian published their article here: https://www.columbian.com/news/2019/jul/09/shell-disease-challenges-work-

to-restore-endangered-western- pond-turtle/ and the Seattle Times published their article here: https://www.seattletimes.com/seattle- news/environment/ravenous-bull-frogs-and-shell-disease-the-trials-and-tribulations-of-the-endangered-western- pond-turtle/.

Showing two young healthy wild turtles off to members of the media

Black-tailed Deer Buck Study: Biologist Holman continued attempts to capture black-tailed bucks for the buck mortality research project. Attempts were made in GMU 672 (Fall River) in combination with conducting the black bear monitoring project. This week a buck was captured by Biologist Novack with Holman on the assist.

Biologist Novack with a captured Black-tail buck in GMU 672

Black-tailed Deer Buck Study: Biologist Holman followed up on the mortality of one of the study black-tailed bucks this week in GMU 568 (Washougal). The buck was captured as a yearling in the summer of 2018 and was killed and consumed by a cougar a year later at the age of 26 months. The buck had moved to an area roughly one mile away from his capture site and settled into his adult range.

Black-tailed buck 26372 at the time of his capture in 2018

Black-tailed buck 26372 remains after cougar predation 2019

Black-tailed buck 26372 remains after cougar predation 2019

Cougar scat at the mortality site of black-tailed buck 26372

Black Bear Population Monitoring in Willapa Hills: This week Regional Director Lee and Regional Wildlife Program Manager Jonker joined Biologist Holman along with Region 6 Biologists Novack and Butler as well as Science Division's Specialist Simpler. The effort marked the conclusion of checking hair snares associated with black bear population monitoring in GMU 672 (Fall River). The monitoring effort involves constructing 36 barbed wire enclosures each set into a 1 square kilometer area. The stations are baited with blood and fish oil. When accessing the attractant, the bears leave hair on the wire barbs. Each location was checked four times during the spring/summer survey period. Bear hair is collected from the barbs and DNA

analysis is used to determine the number of individual bears in the area as well as generate a mark re-sight estimate of bear density.

GMU 672 was selected for this project because it has produced an average bear harvest among southwest Washington GMUs over the past several years, had never been analyzed for bear population, and is made up of roughly two-thirds Industrial Forestlands and one-third DNR managed State Forestlands. Black bear monitoring is concurrently occurring in GMU 117. In future years, the same methodology and effort will be moved to different areas of the State. Over the course of several years, a comprehensive understanding of black bear population density will be generated. The knowledge gained from this undertaking will help WDFW appropriately manage this valued wildlife species.

Special thanks to Regional Director Lee and Regional Wildlife Program Manager Jonker for leaving their busy schedules behind to join field staff for long days of outdoor work on the bear project.

Regional Director Lee collecting bear genetic samples from hair snares in GMU 672

Bear considering entering scented hair snare barbed-wire enclosure in GMU 672

Turkey vulture investigating hair snare location in GMU 672

Pileated woodpecker at hair snare location in GMU 672

Complete set of black bear hair samples from GMU 672 ready for transport and DNA analysis

Lower Columbia River Resident Dark Goose Captures. Biologists Holman, Burlingame, and Novack, Statewide Waterfowl Specialist Wilson, Wahkiakum County Habitat Biologist Grobelny and Officer Dielman joined staff members and volunteers associated with Oregon Department of Fish and Wildlife as well as U.S. Fish and Wildlife Service for the annual capture of lower Columbia River resident dark geese. The effort was successful with 47 newly collared adult geese along with many banded young as a result. Marking the resident dark geese helps with population monitoring and hunting management surrounding dusky Canada geese, which appear very similar to the local birds. Special thanks to JL Aviation's Rod (Raven) Comstock for his expert flying to drive the geese into the capture net.

Pilot Comstock driving geese towards the capture site

Lower Columbia River resident dark geese approaching the capture nets

Banding and collaring resident dark geese in the lower Columbia River

Wahkiakum County Habitat Biologist Grobelny with a lower Columbia resident dark goose

2) Providing Recreation Opportunities

Access Sites: Access staff members Rhodes and McKinlay power washed the restroom roof top at Massey Bar to keep the vents clear for proper venting and to clean off moss build up. In addition, they were also able to cut some low hanging branches that may possibly touch the top of vehicles that use the Silver Lake access site.

Cleaning restroom roof at Massey Bar

Cutting branches at Silver Lake

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

Cougar Sightings: Wildlife Conflict Specialist Jacobsen worked with enforcement officers to follow up on reports of cougar sightings throughout the week.

Cougar Concerns: Wildlife Conflict Specialist Jacobsen visited a landowner that was concerned about the regular presence of a cougar in her small horse pasture. The residence was located in a heavily wooded and rugged area adjacent to a recent clear-cut, now full of lush vegetation and black-tailed deer. The cougar has been using the edge of the horse pasture as a travel corridor to access the clear-cut. The landowner was concerned for her miniature pony as well as for the landowner's small foal that runs around the pasture. Advice was given on making adjustments to the pasture and vegetation to deter cougar use, as well as implementing hazing methods to discourage the cougar from visiting the area.

Cougar on Archway: Wildlife Conflict Specialist Jacobsen received a report of a cougar occupying an archway over a driveway in Clark County. The reporting party's son noticed the cougar as he was walking down the driveway, and took a photograph of it. The cougar left shortly after. Jacobsen responded to the residence and provided advice on living with cougars and protecting the livestock that was present at the residence and at neighboring properties.

Young cougar on top of a driveway arch - Photo courtesy of the reporting party

Bear Concerns: A worried landowner contacted Wildlife Conflict Specialist Jacobsen regarding what she believed was bear scat in her horse paddock at her therapeutic horse riding business. Due to recent sightings of a bear in the nearby area, and because the landowner was unable to send photos of the scat, Jacobsen visited the Clark County site to investigate. The scat turned out to be from a raccoon.

More Bear Concerns: The owner of a wedding venue in Skamania County contacted Wildlife Conflict Specialist Jacobsen because of some scat that was observed near the facilities at the venue. The venue is in excellent bear habitat, with blackberries found throughout the property. A bear was seen a couple of weeks ago, but the owner was concerned about the scat so close to the buildings and walkways, and that fact that new scat was found there every day. Based on the description of the scat, Jacobsen was able to identify the scat as that of a deer. Advice was given to the owner regarding prevention of bear conflicts around the wedding venue.

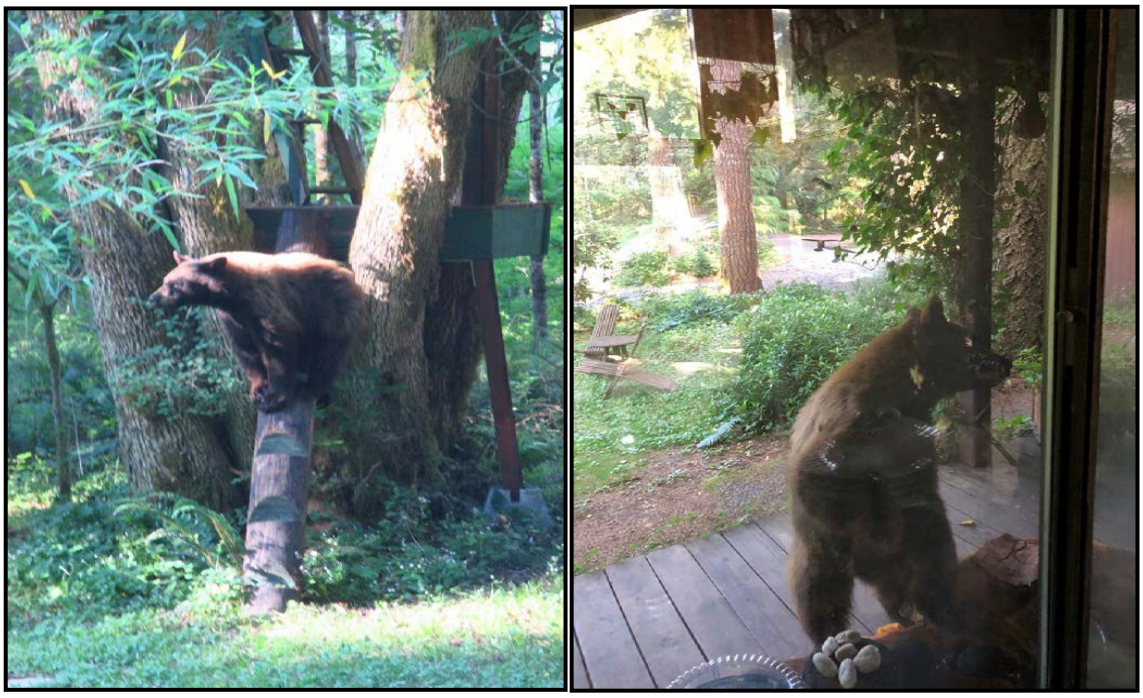
Chicken Depredation: Wildlife Conflict Specialist Jacobsen was contacted by a resident who was concerned that a fisher was attacking his chickens. As the landowner lived outside of known fisher distribution area and habitat, several other species were discussed. Based on the landowner's description of the culprit, it was most likely a domestic cat or possibly a mink. Advice was given on protecting and securing the chickens.

Goat Depredation: Wildlife Conflict Specialist Jacobsen responded to a residence in suburban Clark County where two goats had been attacked and killed over the past two days. Unfortunately, by the time the owner contacted WDFW, he had already buried the carcasses so a complete necropsy was not possible. Based on the description of the scene and the carcasses, the location of the residence, and the observation of coyotes near the goat pen on the night of the attack, Jacobsen was able to confirm the depredation as a coyote attack. Advice was given on fencing and husbandry, should the landowner decide to get any more goats. Jacobsen also provided advice to better secure the landowner's chickens as well.

Goat killed by coyotes

Fenced paddock where two goats were killed by coyotes - Photo courtesy of the landowner

Brazen Bear: Wildlife Conflict Specialist Jacobsen worked with WDFW Enforcement to handle and monitor reports of a young bear in Clark County that was repeatedly interacting with humans. Multiple reports from residents in the area described the bear coming within 10 yards of people, pushing on windows and doors, and breaking into sheds and greenhouses. WDFW Enforcement set a live trap for the bear and was able to successfully catch, ear-tag, and relocate the bear in a less-populated area.



Young bear in a treehouse and attempting to enter a residence - Photos courtesy of the reporting party

Injured Horse: Wildlife Conflict Specialist Jacobsen was contacted by a Lewis County resident regarding a horse that had a severe injury on its rump. The horse owner had taken the horse to the vet, who indicated that the injury was likely from a bear. After examining photos of the injury, Jacobsen was able to determine that the injury was not from a bear or other wildlife, but was instead either a bite injury from another horse in the pasture or an injury from an environmental factor in the pasture such as a fence post or piece of scrap metal or fencing.

Injury to a horse's hindquarters, initially described as a wound from a bear - Photo courtesy of the reporting party

Duck in Fireplace: A homeowner contacted Wildlife Conflict Specialist Jacobsen regarding a duck that somehow made it down the chimney into the homeowner's fireplace. Jacobsen walked the homeowner through the process of catching the bird with a towel and transporting it outside of the house. The homeowner followed the advice and the bird successfully took off when it was released outside the house.

Duck in fireplace - Photo courtesy of the reporting party

Bats in Fireplace: Another homeowner contacted Wildlife Conflict Specialist Jacobsen regarding bats that were roosting in their chimney. Advice was given on making the roost less attractive to the bats as well as sealing up the access when the chimney was not in use, once the bats vacated.

Elk Damage: Several different landowners contacted Wildlife Conflict Specialist Jacobsen regarding elk damage in Lewis County. Jacobsen will continue to follow up with landowners in the area to help deter and minimize elk damage there.

Deer Damage to Tomato Plant: Wildlife Conflict Specialist Jacobsen was contacted by a concerned homeowner who had the top of her tomato plant cropped by a deer or elk. The landowner indicated that she had 16 elk and nine deer in her field, and requested that WDFW remove the animals. Jacobsen provided advice on adding additional fencing to the three-foot fence around the homeowner's garden, suggested hazing the animals away from her garden with a paintball gun, and suggested hunting the animals during the appropriate hunting season. The landowner was still not happy that WDFW would not remove the ungulates causing damage to her garden.

Deer Damage: Wildlife Conflict Specialist Jacobsen was contacted by an organic farm owner regarding deer damage to the farm in Clark County. The landowner estimated that the deer caused $6,000-$12,000 a year in damage to his crops. Jacobsen recommended some temporary deterrents and will visit the farm next week to discuss additional options for the landowner.

Deer Damage: Wildlife Conflict Specialist Jacobsen met with an agricultural producer who has been incurring damage to his organic produce from deer. The landowner was enrolled in a Damage Prevention Cooperative Agreement, and will be working with Jacobsen on a cooperative fencing project to prevent further damage to his crops.

Deer tracks in a field that has been prepared for new starts of carrots and other types produce

Possible Animal in Bushes: A concerned tenant of a senior living apartment complex contacted Wildlife Conflict Specialist Jacobsen because her dog located some animal scat at the complex and began acting like "something was spooking him." The tenant was sure the scat was deposited by a cougar and requested someone to come out and check the nearby woods for the animal. Jacobsen contacted the apartment manager regarding the call and offered to look at any animal scat photos they wanted to send, but felt that a site visit was not warranted at this point due to a lack of substantiated evidence of a cougar. No reports of cougar sightings have been submitted in the surrounding area so far.

Pig Depredations: Two landowners in Klickitat County contacted Wildlife Conflict Specialist Jacobsen regarding a bear that had attacked pigs at both of the residences. On Monday, July 8, the bear visited the first residence where he killed a large (approx. 200 lb.) Kune Kune pig and drug it over the fence and into the woods. The next night, the bear returned and mauled a second large Kune Kune pig, but was unable to kill it. The pig died the next morning in the pen. The bear then broke into the chicken coop and left with a chicken. At this point, the landowner contacted WDFW to report the incidents. Jacobsen and Officer Myers set a trap for the bear. Unfortunately, the third night (July 10), the bear visited the second residence and mauled two other pigs but the landowner scared the bear off in the process. The bear returned to the original residence on the night of July 12 and severely injured a 300 lb. Kune Kune pig, but was scared away by this landowner as well during the process. The bear is still at large, but Jacobsen and WDFW Enforcement personnel are working closely to locate and euthanize the bear.

Llama Depredation: Wildlife Conflict Specialist Jacobsen was contacted in regards to a llama that had died, likely from a predator attack. The owner last saw the llama alive approximately one week prior, and by the time the landowner discovered the dead llama and contacted WDFW, extensive scavenging had occurred and the carcass was extremely desiccated. Jacobsen conducted a necropsy and found that the llama likely died from predation, but at this time, the source of the predation is still unknown.

Deceased llama in a large, open pasture

4) Conserving Natural Areas

Department of Natural Resources Fire Training at the Shillapoo Wildlife Area: The Washington Department of Natural Resources (DNR) conducted fire training on the Shillapoo Wildlife Area practicing water drops from a helicopter. The training was in order to allow fire line crews to communicate with the air crews on where to make water drops in a wildland fire situation. About 25 wildland firefighters participated in the training along with one helicopter flight crew. The helicopter would load water from Vancouver Lake and then fly a short distance to the wildlife area to make the drop in a pasture.

DNR helicopter practicing a water drop

Alder Creek Stream Diversion on the Hoffstadt Unit of the Mount St. Helens Wildlife Area: Wildlife Area Manager Hauswald was conducting a site visit in the Hoffstadt Unit looking for illegal camping and off-road vehicles when he noticed a road collapse from a culvert failure on an old stream diversion that was used for fish rearing more than 40 years ago. The collapse was just upstream of the old rearing pond along Alder Creek and was likely caused by more

water being diverted from the creek into the old channel. As Hauswald continued to explore upstream to the diversion structure it quickly became evident that the berm dividing the creek from the old channel was failing. The creek had been eroding the berm as well as the area behind the old diversion structure causing about one-third of the water coming down the creek to be flowing into the diversion channel. It is likely that over time, the entire berm will erode and that perhaps the majority of the creek will flow through the diversion channel resulting in the loss of about one half mile of fish habitat. This issue was discussed at the recent district team meeting and staff members will start working on finding a solution to problem.

Failing diversion structure on Alder Creek

Cattle Trespassing on the Cedar Creek Unit of the Mount St. Helens Wildlife Area: While working on the Cedar Creek Unit to control weeds, Mount St. Helens Wildlife Area Manager Hauswald noticed evidence that the neighboring landowner's cattle had been on the area recently. It appeared that several cattle had been on the area illegally for several days, due to the amount of forage that had been grazed. Later, Hauswald also notice a pile of fencing supplies and tire tracks from where the cattle owner drove onto the wildlife area by cutting the chain on the gate and placing their own lock on the gate. Hauswald notified WDFW Enforcement of the issues and he accompanied Captain Wickersham and Sergeant Anderson to meet with the landowner to discuss the cattle trespass, the issue of driving onto the wildlife area for the past several months, and building an unauthorized fence on agency lands that was not wildlife friendly. The landowner was provided notice to remove the fencing supplies and that he can no longer drive onto the wildlife area without first getting permission from WDFW. The landowner was confrontational and stated that the cattle were going to be butchered very soon and that hopefully there will no longer be cows coming onto the wildlife area. Wildlife area personnel will work on fixing the fence in the next couple of weeks.

Fencing supplies left on the Cedar Creek Unit

Klickitat Wildlife Area Weed Control: Assistant Manager Steveson treated rush skeletonweed plants with herbicide this week as part of the ongoing effort to stop the spread of this highly invasive weed on the Soda Springs Unit. Manager Van Leuven surveyed part of the Sondino Unit to determine what weed species need the most urgent attention there.

Klickitat Wildlife Area Pond Level Monitoring: Water levels in most of the ponds on the Sondino Unit are subsiding, as is normal during the summer. Compared to last year water levels are looking good. The major ponds contain enough water to last well into the fall, which will allow western pond turtles to remain aquatic for the full duration of their active season. Manager Van Leuven cleaned three gauges so they may be read from the bank through binoculars.

Klickitat Wildlife Area Grazing Monitoring: Assistant Manager Steveson checked key watering points on the Simcoe Mountains Unit to see if cattle are present on the grazing permit areas and stocked the box on the reader board with the 2019 hunting regulations. He also posted an emergency restrictions sign at the parking area at the main public access point.

REGION 6

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Olympic Mountain Goat Translocation Project: Multiple Region 6 and other WDFW staff members have been engaged in processing captured goats at the southern processing area. Key personnel include District Biologist Murphie who is the southern site coordinator/lead, Biologist Ament who served as our full time site safety officer and District Biologist McMillan who is the WDFW representative at the northern site led by the Park Service. With the exception of weather that has hindered aerial captures, operations have run smoothly which is in no small part to the professionalism of staff members involved including the Park Service and Forest Service who are our partners in the effort. Final numbers for the July capture period are not yet available and will be included in a future report.

Western Gray Squirrel Occupancy Surveys – Klickitat: Biologist Linders assisted District 9 staff members by setting five hair tube transects in Klickitat County. Several active nests were found on one transect during the walk in, so set up was abandoned. The remaining four transects will be checked at two weeks, four weeks, and eight weeks following set-up. It was the first time Linders revisited squirrel habitat in Klickitat County since completing her Master's work in 2000. In spite of being relatively close together on a landscape scale, the remote location of many transects made access slow.

Taylor's Checkerspot - Toxic Analysis of Host Plant Samples: Biologist Linders collected *Plantago lanceolata* (larval host plant) samples from four reintroduction locations on three Puget lowlands sites and sent them for analysis to OMIC USA, Inc. in Portland. Samples were being tested for herbicide residues, and for a solvent found in the ground water in the vicinity of one site. The objective of this work was to rule these out as potential factors in the failure of checkerspots to establish on two of the three sites. Herbicides are used in restoration, and break down at varying rates. One sample had low levels of two, 4-D compounds; the other three samples came back with no detectable residue. The sample containing two, 4-D was treated within the past two years. Different compounds were used at different sites, and we only tested for compounds known to be used at a given site. The potential for other toxic residues to be present cannot be ruled out, but would be more difficult and expensive to try to identify.

Streaked Horned Lark: Biologists Tirhi and Butler completed the third and last lark survey at the Olympia Airport.

Bat Maternity Colony Monitoring: Biologist Blatz, Butler, Tirhi, Tobin, and two volunteers completed both exit surveys at the Evergreen State College as part of bat population and white-nose syndrome monitoring. Survey one resulted in 317 bats counted and survey two resulted in 186 bats counted. Butler, Tirhi, Tobin, and Terry also completed one of two surveys at the Elbe maternity colony and will return next week for the last. Partners at JBLM, Northwest Trek and Wolf Haven are completing theirs as well.

Black Bear and Black-tailed Deer Monitoring: Biologist Tirhi and Holman spent one day in the Willapa Hills attempting to dart and radio-collar black tailed deer followed by checking nine of the 36 bear hair snag stations. The bear research pilot project is being conducted at various stations across the state to test this new population monitoring approach. Black-tailed bucks are being radio-collared in this final year of the three-year research project aimed at understanding black-tail fecundity, mortality, and habitat use. Tirhi and Holman obtained bear hair from six of the nine stations checked. Although the team saw up to four bucks during the day, none were in range to get a tranquilizer shot off for capture and collaring.

Biologist Holman resetting a black bear hair snag set in Willapa Hills

Deer Tracking: Biologist Tirhi and volunteer Terry retrieved the last radio-collar from a buck collared in 2018-19 in the district, located on the Vail Tree Farm. The VHF function of the collar ceased to work months after the buck was collared and the GPS function ultimately began to malfunction. This made tracking and determining survival of the buck very difficult. Deer specialist Hansen created a software program to track signals that were received which eventually alerted staff to a mortality signal. Tirhi and Terry travelled to the GPS location received and after one hour of searching with no signal to follow were about to give up when Terry located the collar on a deer bed. The collar was retrieved and turned back in to the program. Perseverance paid off—great job volunteer Terry!!

Volunteer Terry holding up the located deer radio collar

Mazama Pocket Gopher: Biologist Tirhi met with Real Estate Division to discuss and begin the creation of the management plan for a conservation easement recently purchased by WDFW on a working farm occupied by state and federally listed pocket gophers. A management plan is required by the funding agency, U.S. Fish and Wildlife Service, and guides all site management. This is only the second management plan ever written by WDFW for a conservation easement and so brainstorming on content is ongoing.

Cougar Management: Biologist Tirhi represented District 11 at the internal cougar management working group meeting held in Ellensburg. The group has been assigned by the director to review/analyze our cougar management guidelines and improve or replace, as necessary. Following several internal meetings, the public and cooperators will be contacted to provide input on proposals brought forward. One very clear pattern that emerged from the meeting is that there are very different opinions about cougar status, cougar depredation, and liberalization of cougar hunting on the east versus west side of the state.

Bog Beetle Monitoring: Biologist Tirhi and volunteer Terry completed bog beetle surveys for 2019 in District 11. Volunteer Terry visited and assessed habitat conditions at 10 locations in District 11. Tirhi and Terry completed surveys including trapping (requires two visits) at six of those sites and found Beller's ground beetle at two and Hatch's click beetle at none of the sites. Two additional sites were attempted to access but thick brush/swamp vegetation prevented access and may be attempted again dependent on staff time available.

Beller's ground beetle habitat showing sunbursts plants, which trap insects that beetles prey upon

2) Providing Recreation Opportunities

Wishkah River Tree Removal and Road Repair: A massive Alder tree in the process of falling created a dangerous huge trench in the entrance road to this site. WDFW closed the site for public safety until the proper permits were attained for the road repair.

Working with a private tree company, Tyler Hurley and Weston Masteller from CAMP and the water access team directed the falling and moving of the tree upland per permit specifications. The road failure was repaired, additional rock was brought in to dress up the remainder of the road. Everyone involved did a great job. The project went perfectly and was completed under budget. This site is once again open for public use.

3) Providing Conflict Prevention and Education

Nothing for this installment.

4) Conserving Natural Landscapes

Habitat Assessment at JBLM: Biologists Linders and Randolph surveyed Marion prairie utilizing the Rapid Habitat Assessment (RHA) methodology to quantify habitat characteristics important to Taylor's checkerspot. The request was made by JBLM personnel as a follow-up to flight season observations. The site supports significant areas of high quality native prairie, with a moderate amount of nectar plants and large patches of abundant host plants (*Plantago lanceolata*). At least 27 oviposition locations were found with minimal searching, which were the result of adult checkerspots dispersing from sites on the artillery impact area one to three miles away. Biologists also assessed portions of Training Area 7S, where checkerspots have been released for five consecutive years. Only one larva was found in searches of that site, in spite of abundant host and nectar resources for Taylor's checkerspot.

Prescribed Burn Planning: Biologists Linders, Randolph, Cook, Lowery, and Potter, as well as Research Scientist Olson, conducted field visits to Scatter Creek and West Rocky Prairie to review proposed burn units for 2019. Dave Hays was also present for the trip to Scatter Creek South. Discussion was had on the number and size of burn units, details of unit boundaries relative to important resources and restoration needs, and strategies for insuring efficacy given the limited opportunities for implementing prescribed burns. At the current rate prescribed fire is being applied on these sites, the average fire return interval is about 15-20 years, which is longer than desired for maintaining prairie habitat, let alone what is needed for restoration.

Chehalis Basin Strategy, Aquatic Species Restoration Plan: Biologist Tirhi met with staff members from headquarters Wildlife and Habitat programs to discuss and plan projects and funding for Oregon spotted frogs related to grant funds made available thru this restoration plan. WDFW was awarded $271,000 towards spotted frog restoration activities. Tirhi submitted requests for funding Reed canary grass control at three sites, livestock fencing at one site, survey assistance at one location, and phase 1 of pond creation at one site. The objective of the internal meeting was to create options to put forward to the steering committee. More information on the Chehalis strategy can be found here: http://chehalisbasinstrategy.com/aquatic-species-plan/.

5) Providing Education and Outreach

Nothing for this installment.

6) Conducting Business Operations and Policy

Efficient Office Windows: District 11 would like to thank WDFW Construction Project Coordinator Mosberger for organizing the installation of the new windows at the district office. The district office is always trying to improve on energy efficiency. Winters will definitely be warmer at the office now!

New energy efficient windows at the District 11 office, Lakewood

Contracts: Biologist Linders completed a final report for the Mission Creek Captive Rearing Expansion Project. Increases in production of larvae mean that populations on translocation sites are likely to establish faster assuming sufficient amounts of suitable habitat are present on site. In addition, Biologist Linders worked with JBLM personnel to scope the next round of contracts to support the Taylor's checkerspot Captive Rearing and Translocation Project, insuring there are no breaks in funding at the rearing facilities and that work continues unabated.

7) Other

District Biologist Murphie was announced as the Region 6 Wildlife Program Employee of the Year at the recent regional awards ceremony. Congratulations Bryan! Without going into all the details, his leadership on the mountain goat project, elk herd planning, and our interactions with tribal biologists were key in his nomination for this award. Selecting a recipient for this annual award is no easy task, with all the talented and dedicated people that work here.

Biologist Murphie (left) - Photo courtesy of Betsy Howell, USFS