

Wildlife Program – Bi-weekly Report

July 16 to July 31, 2019

DIVERSITY DIVISION

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Short-eared Owl Surveys: Natural Resource Scientist Buchanan interacted with volunteers in the Western Asio flammeus Landscape Survey (WAfLS) to obtain their survey results from the 2019 effort. This was a difficult year, as late and substantial snowfall greatly delayed surveys across most parts of the eight-state survey area, including Washington. In addition, the data entry template and process changed between 2018 and 2019 and this caused frustration among some volunteers. We will resolve this issue prior to the 2020 field season.

Candidate Species Assessments: Based on comments provide by species experts, Natural Resource Scientist Buchanan finalized revisions to candidate species assessments for white-headed woodpecker and flammulated owl.

Bat Monitoring: Biologists Tobin and Salzer followed up on two bat colony reports submitted by the public to WDFW through the online system (<http://wdfw.wa.gov/bats>). Tobin and Salzer identified species visually and by using specialized acoustic detectors. Both colonies are maternity colonies for big brown bats (*Eptesicus fuscus*). One had about 60 bats and the other had about 100 bats. Additionally, WDFW Biologist Tobin and Wickhem along with members of Bats Northwest counted a new colony near Washougal. This colony had over 250 bats roosting in bat houses the landowner built. These reports are very valuable since they help WDFW learn more about bat roosting ecology, health and population trends.



WDFW Biologists and members of Bats Northwest counting a colony of bats emerging from bat houses



New big brown bat maternity colony reported to WDFW via the online public reporting system

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**

Small Game and Furbearer Harvest Data: Small Game and Furbearer Specialist Kindschuh reviewed and compiled annual harvest data from trapper reports of catch, CITES pelt sealing reports, and forest grouse wing and tail collections. Some of these data were removed from the website temporarily during the upgrade, but Science Division is working with the web team to develop a new system for sharing these data.

Elk management: Game Division Manager Aoude, Deer and Elk Section manager Hoenes, and Elk Specialist Garrison met with regional program managers and district biologists to discuss management of the Colockum, Yakima, and Blue Mountain elk herds. During the meetings, the group discussed survey results, harvest estimates, current regulations and permit levels, and factors influencing the dynamics of each population.

Treponeme-associated Hoof Disease (TAHD): Elk Specialist Garrison and Deer and Elk Section Manager Hoenes are developing a project plan for the completion of the TAHD survival and productivity research project. Then Hoenes, with regional and Science Division staff

members, initiated this project in 2015 to understand the potential impacts of TAHD on elk, and data collection completed in May 2019. Hoenes and Garrison will be facilitating meetings with project collaborators, both internal WDFW staff members and external content experts, in the coming months to determine analytical approaches and begin data analysis.

WDFW staff members, including Game Division Manager Aoude, Deer and Elk Section Manager Hoenes, and Elk Specialist Garrison, met with Dr. Margaret Wild of Washington State University (WSU) to discuss TAHD management and research. Among the topics discussed was WSU's captive elk facility. Nearly complete, WSU researchers will use the facility to conduct experiments to better understand the etiology and epidemiology of TAHD. WDFW will assist WSU in the coming months to coordinate and conduct elk captures to populate the facility. Other topics discussed were WSU's social science project regarding TAHD, the relationship between antler growth and disease status, and hoof sampling needs for a metagenomics project.

Status and Trend Reports: Elk Specialist Garrison worked with regional staff members to collate available survey estimates for many of Washington's elk populations. Garrison updated the survey and harvest database with available data and produced figures for the information currently available.

2) Providing Recreation Opportunities

Nothing to report this period.

3) Providing Conflict Prevention and Education

Washington Beaver Relocation Pilot: Carnivore, Small Game, and Furbearer Program Manager Simek, Small Game and Furbearer Specialist Kindschuh, and Small Game and Furbearer Biologist West met with the Beaver Working Group (BWG) in Ellensburg, Washington. This gathering included meetings for the relocation, training, and habitat subcommittees as well. Highlights to these productive meetings included project updates, development for the upcoming Beaver Relocation Pilot training, and the future direction of the BWG.

Following the Ellensburg meeting, Small Game and Furbearer Biologist West traveled to Okanogan County to meet with the Methow Beaver Project, who serves on the BWG and will be hosting our training in August. Further collaborative decisions surrounding the training structure, logistics, and instructor assignments succeeded as a result of this meeting.

4) Conserving Natural Landscapes

Nothing to report this period.

5) Providing Education and Outreach

Washington Beaver Relocation Pilot: In June, the small game and furbearer unit reached out to Point Defiance Zoo and Aquarium (PDZA) about an outreach effort focused on beavers. Over

the past few weeks, Small Game and Furbearer Biologist West has worked with PDZA to develop the scope of beaver media collection to support WDFW's Beaver Relocation Pilot (BRP). With the launch of the BRP, we aim to promote co-existence and mitigation of beaver activities, with relocation as a last resort to lethal removal. Through various content, we're hoping to share the secret life of beavers with visual storytelling.

Products of this outreach may include: generating visuals to complement the BRP's training course; creating short, informative clips about beavers and their impact on the landscape to share with the public on social media; and featuring clips on our website for current Permittees or those interested in becoming permitted beaver relocators under the Pilot. Small Game and Furbearer Biologist West met with PDZA to begin capturing footage of their resident beaver family. Additional footage will also be recorded with the help of personnel at the Northwest Trek Wildlife Park.

Treponeme-associated Hoof Disease (TAHD): Elk specialist Garrison met with Public Affairs Communication Manager Montgomery to discuss outreach materials and strategies for communicating information about TAHD. Garrison and Montgomery worked on joint talking points and messaging for internal staff members and WSU personnel. Garrison and Montgomery will continue working together on broader, longer-term outreach regarding the disease.

6) Conducting Business Operations and Policy

Nothing to report this period.

7) Other

Nothing to report this period.

HUNTER EDUCATION

No report this period.

LANDS DIVISION

No report this period.

SCIENCE DIVISION

No report this period.

REGION 1

No report this period.

REGION 2

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Northern Leopard Frogs: Over the past few months, Oregon Zoo has been caring for northern leopard frogs collected from Potholes Reservoir (as eggs). In the past few months, these frogs have developed from tadpoles to metamorph froglets. Biologist Grabowsky traveled to Oregon Zoo to assist with the release of these frogs. Before release, each frog was marked using an elastomer tag. Visual implant elastomers are colorful polymers injected underneath the skin and used to identify batches or cohorts of individuals. By marking each frog, WDFW biologists will be able to track survival over the next few years. After the tagging process, the frogs were packed and transported to Columbia National Wildlife Refuge. Another frog release will occur in the next few weeks when the remaining frogs have fully developed.

Biologist Grabowsky has continued planning for the large northern leopard frog survey effort set to start mid-August. By performing surveys at Potholes Reservoir, WDFW hopes to collect valuable population, habitat, and disease information about the last surviving population of northern leopard frogs in Washington. Hopeful volunteers, please contact Emily Grabowsky (emily.grabowsky@dfw.wa.gov) for details about the survey effort and how to get involved.



Northern leopard frog metamorphs right before release at Columbia National Wildlife Refuge

- Photo by Emily Grabowsky

Washington Predator Prey Project: WDFW Biologist Heinlen checked remote cameras placed at two radio collared mule deer mortality events in the Methow study area of the WDFW/University of Washington Predator Prey Project. Cameras captured several wildlife species including magpies, golden eagles, turkey vultures, coyotes, bobcats, and cougars (one radio collared). The project is exploring multiple research topics including carnivore/ungulate interactions. The companion Meso-carnivore Project is investigating the interrelationships between large carnivores and mid-size (meso) carnivores scavenging at large carnivore kill sites and the extent to which this interaction enhances or suppresses meso-carnivores populations.





From top: bobcat, radio collared cougar, and turkey vultures utilizing carcasses at mule deer mortality sites – Photos by University of Washington/WDFW remote cameras

Wolf Management: Biologist Heinlen set up and checked cameras monitoring the Beaver Creek wolf pack in GMU 204. The cameras were able to capture a minimum of three pups. More information about wolves can be found at the WDFW Gray Wolf Conservation and Management page at: <https://wdfw.wa.gov/species-habitats/at-risk/species-recovery/gray-wolf>



Three wolf pups in the Beaver Creek pack – Photo by WDFW remote camera

Bumble Bee Surveys: Biologists Fitkin and Heinlen continued bumblebee surveys. Biologist Heinlen coordinated a survey effort organized by the Okanogan Highlands Alliance (OHA) and led by Xerces Society Biologist Rich Hatfield, Okanogan Highlands. The effort was part of the Bumble Bee Watch project. Bumble Bee Watch is a collaborative effort to track and conserve North America's bumble bees through community science. Of note, the surveys documented the western bumble bee (a WDFW species of greatest conservation need) which is in decline in much of its range, but appears to be doing well in the Okanogan Highlands. More information about the Bumble Bee Watch project can be found at: <https://www.bumblebeewatch.org/>.



The western bumble bee (Bombus occidentalis) – Photo by R. Hatfield



Lynx and bumble bee habitat near Washington Pass – Photo by S. Fitkin

Pygmy Rabbit Safe Harbor: Biologist Hughes received feedback from the Douglas County Farm Service Agency (FSA) that an exemption from doing Mid Contract Management (MCM) in a landowner's general Conservation Reserve Program (CRP) field was approved. The CRP field had pygmy rabbit habitat and there are two active burrows approximately 500 meters south of the CRP field. It took almost a year to get confirmation that the exemption was approved. Based on the lag time of getting confirmation for an exemption from mid contract management, Hughes is now working with FSA to review fields a year or two prior to them being due for MCM. Hughes coordinated with Biologist Gallie about two general CRP fields and one State Acres for Wildlife Enhancement (SAFE) field in Douglas County that will be due for MCM soon. All of these fields are enrolled in safe harbor and have active pygmy rabbits burrows in them. Biologist Hughes worked with Gallie to write up a proposal for FSA to review requesting the two general CRP fields to be exempt from MCM. After reviewing the SAFE field it will not need an exemption.

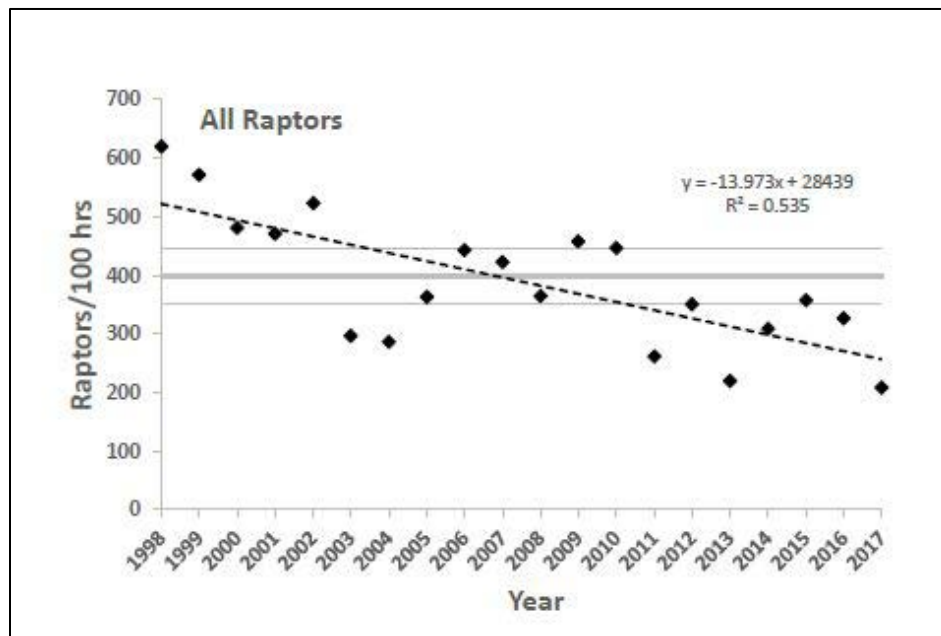
Game Camera Check: While spending a day following up on reports of wolves, Specialist Bridges checked trail cameras to see if they had documented any evidence of the reported wolves. While there was no documented wolves plenty of other wildlife made an appearance throughout the week.





Various wildlife photographed by game camera – Joe Bridges, WDFW

Migratory Raptors: Biologist Comstock submitted the final two-year report for the Chelan Ridge Hawkwatch Aquatic Lands Enhancement Account (ALEA) grant. Last year, 2018, marked the twenty-first of annual fall migration counts for migrating raptors at Chelan Ridge. This site continues to provide important data to monitor long-term trends in raptor populations as well as offering unique community education opportunities to diverse audiences. The 2019 season will begin August 23 and visitors are welcome. Peak migration typically occurs in the second week of September.



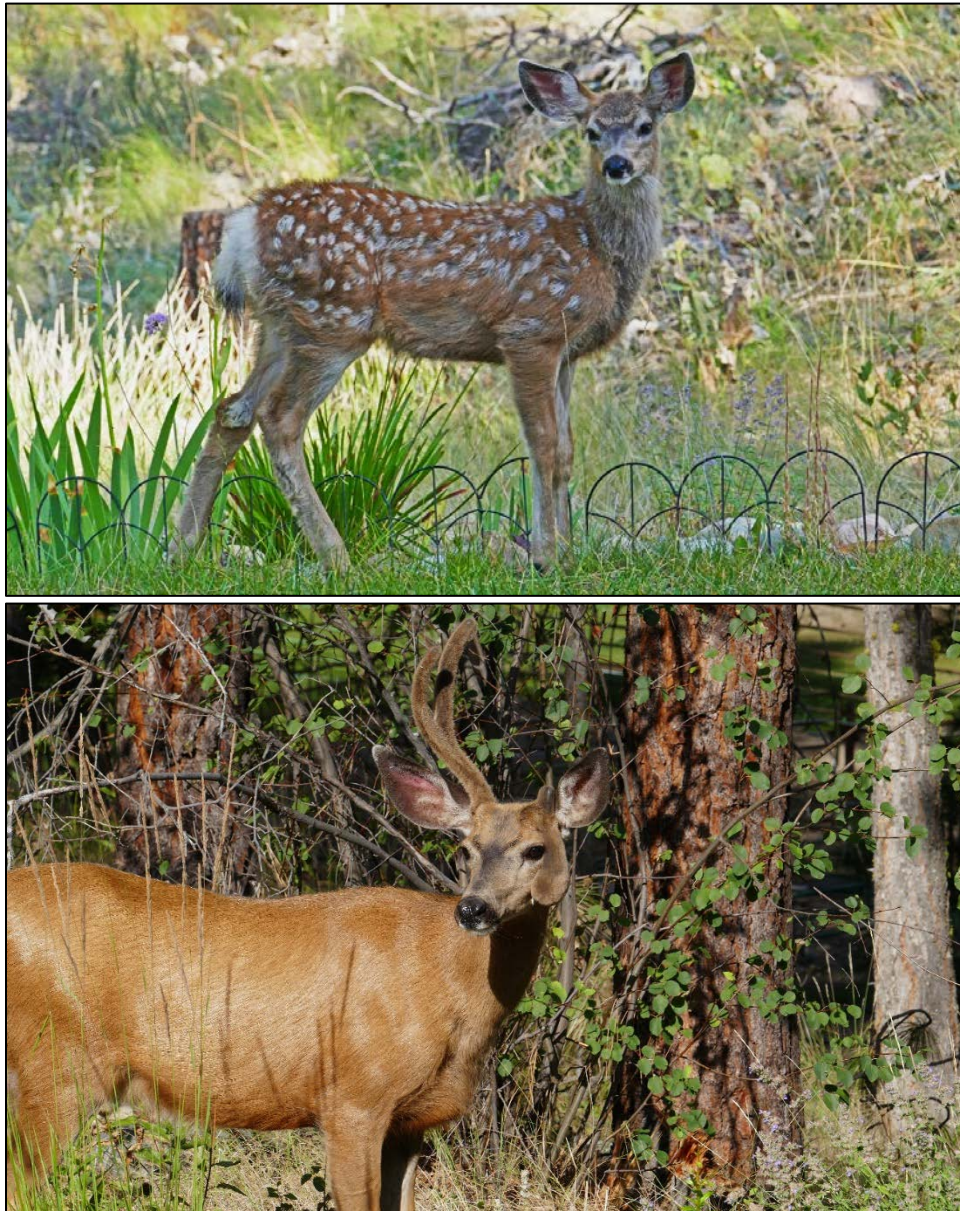
20-year trend of migratory raptor counts at Chelan Ridge (from Oleyar and Watson 2018, Hawkwatch International)

2) Providing Recreation Opportunities

Chelan County Mule deer: Biologist Comstock began working on developing maps of target areas to deploy GPS collars on female mule deer in winter 2020. Secretarial Order 3362 has provided funding for investigation of the migratory pathways of mule deer in the East Slope Cascades Management Zone. Currently the plan is deploy 100 collars spread across District 7

and District 8. The high-resolution location data will then be fed into a Brownian bridge movement model, which will essentially create a heat map of seasonal habitat use and corridors.

Watchable Wildlife: Deer fawns are more easily viewable now that they are older and more mobile. Good viewing opportunities exist around dawn and dusk, particularly in irrigated agricultural fields or other green areas in the valley bottoms.



From top: Mule deer fawn and mule deer buck with deformed antler – Photos by S. Fitkin

Providing Hunting Information: Specialist Bridges began fielding phone calls from hunters who successfully drew a deer or elk permits within the region. There is a lot of anticipation for these hunts, especially within the Malaga antlerless elk permit holders, to get out in the field!

Specialist Bridges will direct successful draw applicants to willing landowners that are experiencing damage, in an effort to reduce damage and increase public access.

Duck Brood Surveys: Biologist Rowan began pre-baiting for ducks to prep for eventual banding. Rowan also provided Specialist Wilson with cinnamon teal locations after spending a day scouting. We plan to perform captures and apply transmitters in the near future. Lastly, Rowan searched more nesting tubes for mallard nesting, but those that allowed for visibility were empty. Most of the nesting tubes that were maintained and evaluated this summer have not held duck nests.

Mourning Dove Banding: Biologist Rowan continued to pre-bait for doves, and created fake traps to reduce theft until formal trapping begins after she returns from annual leave. Biologist Dougherty assisted with dove banding efforts. Over the span of about five days there were 103 doves captured and banded. The data collected from those banded doves will be used to inform management decisions throughout the Pacific Flyway.



Banded mourning dove - Photo by Sean Dougherty

3) Providing Conflict Prevention and Education

Necropsy of Pet: Specialist Heilhecker and Officer McCormick investigated a dog death that occurred over the weekend. The owner's last saw their 15 pound dog before going to bed. The dog routinely chased deer and could leave the house through an unlocked "doggie door." The dog was found approximately 150 yards from the house. Based on bite marks with associated hemorrhaging on the neck, damage to the skin, and tracks in the field, they determined a bobcat killed the dog.

Wolf Collar Status Update to Producers: Specialist Heilhecker notified producers with data sharing agreements that the GPS collar in the Loup Loup pack is no longer transmitting data. Therefore, WDFW deactivated their accounts. Producers will be able to reactivate their accounts if a wolf with a functioning GPS collar establishes a territory within their grazing allotment. Specialist Heilhecker also returned a GPS collar, placed on a yearling female in the Beaver Creek pack, to Wolf Specialist Roussin. Specialist Heilhecker collected the collar about one month after it was deployed. Each pack has one wolf carrying an active VHF collar, but location data cannot be tracked on the computer.

4) Conserving Natural Landscapes

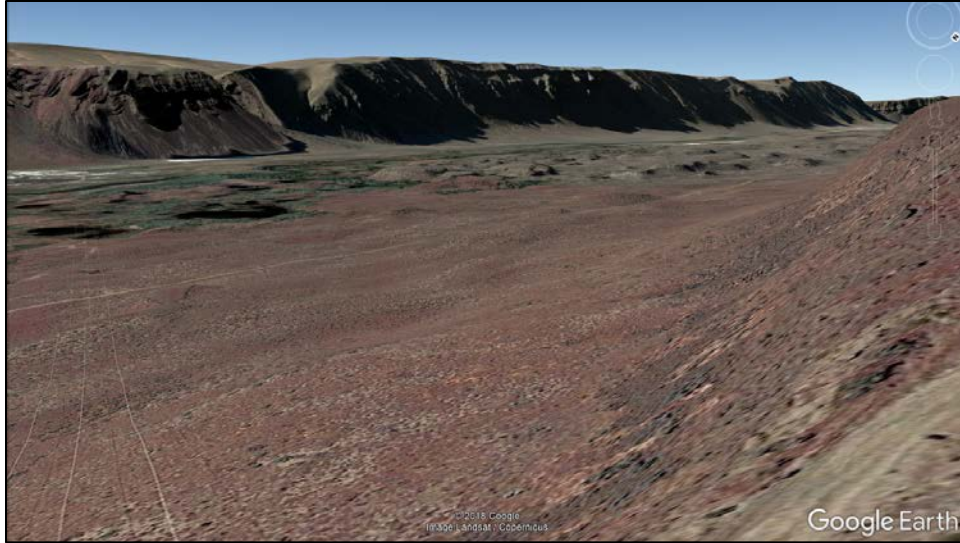
Tour of the 243 Fire – Lower Crab Creek Unit: Region 2 North Lands Operations Manager Haug met with Region 2 South Lands Operations Manager Finger and Columbia Basin Wildlife Area Manager Eidson to tour the 243 fire that significantly impacted the Lower Crab Creek Unit of the wildlife area. The staff members discussed various ideas on how to react to the different levels of severity on the landscape: what methodologies have been implemented in the past, which have been successful, and where should any possible restoration funding be directed that will provide the greatest good to the recovery of this landscape. Lands Operations Manager Haug provided his experiences following the Carlton and Okanogan complex fires but recognized the differences in habitats and climate between Okanogan and Grant counties. Most sagebrush species, such as basin big sagebrush which occurred in abundance within the previously burned area, do not resprout after a fire and rely on seed for natural re-establishment. Unfortunately, this process can take decades. As one would expect fire severity and vegetative response was variable across the area, making it challenging to plan for intervention. With or without intervention, sagebrush-dependent species will be impacted by this fire for many years to come. On a brighter note, milkweed, necessary for healthy Monarch butterfly populations, and lemon scurf pea, a native of the western United States and dune stabilizer, were coming back strong.



A close up of the severely burned sagebrush steppe north of Crab Creek within the wildlife area unit that seemingly completely lost the organic layer of the soil – Photo by Haug



Region 2 South Lands Operations Manager Finger wading through a sea of milkweed that responded favorably in many places within the 243 fire - Photo by Haug



Pre-fire Google Earth view showing shrub coverage before the burn, see next image for comparison



Post-fire view of Google Earth image showing exposed sand dunes, which were actively moving while we were there



Some native perennial bunchgrasses coming back where burn severity appeared relatively low and where moisture availability was likely a little higher due to topographic low - Photo by R. Finger

5) Providing Education and Outreach

Low-tech Wet Meadow and Riparian Restoration Workshop: Big Bend Wildlife Area hosted a restoration workshop where participants learned how to install hand-built structures to preserve and/or repair hydrology in degraded mesic habitat. The two and a half day workshop entailed a classroom component and field day demonstrations along a wet meadow of School Creek and a riparian limited corridor along China Creek. The workshop served a dual purpose: 1) to introduce land managers in Washington to low-tech restoration methods and 2) to preserve and/or repair hydrology in a riparian and wet meadow system. Workshop instructors were J. Maetras, Natural Resources Conservation Science, and S. Conners, bio-consultant. Conservation Northwest, CCT, and WDFW all played integral parts in coordination, permitting, and collection of vegetation fill. Participants came from conservation districts, the tribes, private ranchers, land trust managers, non-profits, state and federal agencies with the intent for each entity to be able to use these practices in their own jurisdictions. At School Creek, participants installed four Zeedyk rock structures along a wet meadow intended to stop or hinder headcut progression, spread surface runoff and promote aggradation of incised channels. Without active management, the wet meadow is at risk to additional loss that occurs when the headcut lip experiences scouring during water events. At China Creek, participants installed eight postless beaver dam analogs using native materials including vegetation clippings, sod, and rock. The goal of restoration at this site is to double the riparian zone as it more frequently reconnects with the inset floodplains. The workshop was a sweaty but gratifying success but the success of the restoration will require adaptive management over years to come.



Participants pose after the installation of a one rock dam intended to slow the flow of water, increase bank infiltration, capture sediment, and, over time, raise the channel bed elevation –

Photo by J. Maestas



Private Lands Biologist Braaten getting instruction on which rock to move



Grand Coulee zuni bowl and one rock dam Zeedyk structures – School Creek, Big Bend Wildlife Area

6) Conducting Business Operations and Policy

Columbia Basin Wildlife Area Planning: Lands Operations Manager Finger continued to pull together various stakeholders to supplement the Columbia Basin Wildlife Area Advisory Committee (WAAC) during discussions about recreation management in the Quincy Lakes Unit. The current concept is to have a field tour of the unit with the WAAC, and additional stakeholders selected to balance the recreational demands of the area, on September 20. After the field trip, we plan to have winter workshops to start pulling together several alternatives on how to move forward with managing and enhancing the diverse and intense recreation that is occurring. In addition to the WAAC, we currently have confirmed interest in participation from three mountain bikers, an ice age floods enthusiast interested in trails development on Babcock Bench, a representative of the Quincy Chamber of Commerce and the Port of Quincy, and we continue to work on identifying representatives of the hiking, horseback riding, and rock climbing groups.

REGION 3

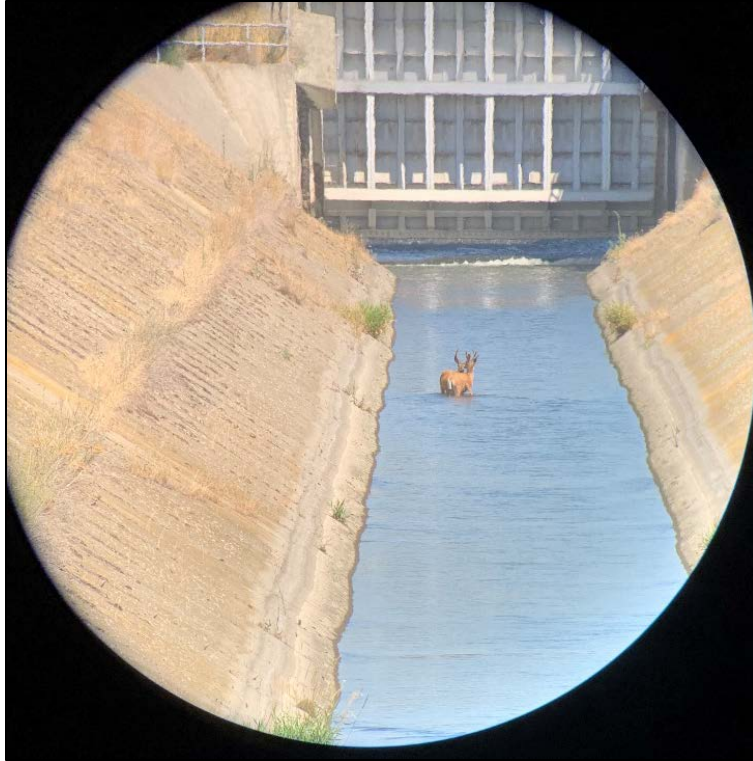
HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Dove Banding Continues: District 4 Wildlife Biologist Fidorra put in many early evening hours trapping mourning doves. Over 75 doves have been banded in District 4, which is more than in the past few years, but still relatively low. Biologists all over that state seem to be having difficult trapping seasons of late. Trapping will continue into mid-August.

Large Numbers of Deer Trapped in Canals: District 4 Wildlife Biologist Fidorra and Wildlife Conflict Specialist Hand responded on two occasions to the Esquatzel Canal north of Pasco after deer were reported trapped. These were the fourth and fifth incidents this month in this location! In both instances, coordination with irrigation districts and power infrastructure personnel resulted in positive outcomes for the animals. On the first call out, Fidorra and Hand were able to successfully haze two buck deer to an area of the canal with earthen banks so they could escape the canal. Two days later, the same two bucks were again trapped in the canal approximately seven miles further west. After dropping the water control gate the deer were hazed out of the canal and were last seen swimming in the Columbia River. A long-term solution is needed. Fidorra is working with irrigation districts and partners to identify solutions for this and other areas across the Columbia Basin.





Two bucks trapped in the Esquatzel Canal, on two separate occasions



Conflict Specialist Hand hazing deer to a gate being opened by irrigation district staff members

Washington Sage Grouse Need a Lift: District 4 Wildlife Biologist Fidorra coordinated the Washington Sage Grouse Technical Team meeting to discuss sage grouse issues and needs with several partner agencies in Washington. The 2019 population estimate was 676 down from 710 last year. Partners identified and discussed actions pertaining to fire management, pesticides,

status reviews, and translocations. The team will be reviewing management plans and action items over the fall in preparation for the annual Grouse Working Group meeting in November.

Biologist Bernatowicz trapped mourning doves one evening and morning. Only three mourning doves were captured. Wheat has been cut and large numbers of doves are arriving, but over 90 percent are Eurasian collared doves.



One mourning dove and 11 collared doves

Biologist Bernatowicz surveyed two patches on milkweed along I-82 for monarch larvae. No sign of monarchs, but both red and blue milkweed beetles were observed. Overall, signs of feeding on milkweed were low, but a few plants had high concentrations of beetles.



Patriotic red and blue milkweed beetles

Sunnyside Wildlife Area Natural Resource Technician Rodgers pulls a disk through the Phase 1 wetland of the Windmill Unit. She then planted buckwheat and millet, which grows well in the moist soil and will provide forage for waterfowl in the fall and winter months.



2) Providing Recreation Opportunities

New Hunting Access Opportunities Available: Region 3 Private Lands Biologist Hulett continued working on hunting access contracts. Landowners still needing to sign their contracts were called. However, with wheat harvest and large cattle sales taking place, Hulett was only able to leave voicemails. One contract was returned to Hulett and then mailed to Olympia for the final signature. Another contract was fully executed and then added to the PHLO system: Wallace Walker Road #831.

Sunnyside Wildlife Area Assistant Manager Ferguson, Natural Resources Technician Wascisin, with help from Manager Kaelber, repaired a section of crushed pipe supplying the Rice Paddies wetlands on the headquarters unit. The pipe is now repaired and able to once again pump water and fill the wetlands when necessary.



Wenas Wildlife Area personnel posted signs implementing a temporary emergency closure on about 50,000 acres on the eastern end of the wildlife area in association with the July 24 pipeline fire. The closure is for the protection of firefighters and to help ensure public safety. It is anticipated that the restriction will be in place until approximately Aug. 25, while firefighters mop up the blaze and guard against flare-ups.

3) Providing Conflict Prevention and Education

Cold Creek Fire: On July 18, a fire started on Hanford near the Highway 24 and Highway 240 intersection and continued to burn for two days burning approximately 42,000 acres including almost all of the north face of Rattlesnake Mountain above the 1200 road. District 4 Wildlife Conflict Specialist Hand monitored fire encroachment of unharvested wheat crops and elk and deer movements and distribution after the fire was contained.



Cold Creek fire - 2019

Rattlesnake Mountain Hazing: Wildlife Conflict Specialist Hand continued to spend a great deal of time hazing problem elk from several winter wheat fields, mostly after dark and into the early morning hours. Increasing numbers of elk have been observed since over 42,000 acres of Hanford burned in the Cold Creek fire.

District 8 Conflict Specialist Wetzel worked on several fencing construction contracts in Badger Pocket and Thorp. Elk activity in the area is increasing, and a large bull group is located in the Badger Pocket area on the Yakima Training Center.

Crop producers have contacted Conflict Specialist Wetzel about damage permits for elk in the Kittitas, Ringer, west Ellensburg, Cle Elum, Teanaway, Thorp, Reecer Creek, Coleman, and Park Creek areas. Temperatures have been cooler and elk have tended to stay out of second cutting so far this summer.

Conflict Specialist Wetzel repaired fencing in the Tampico area. Several master hunters will also work in that area doing as much fence repair as they can on the over eight miles of elk fence. One location was investigated as a potentially good location for a cattle guard.



Driveway through the elk fence that is a good candidate for a cattle guard

4) Conserving Natural Landscapes

Green Strip Fire Break Project Moving Forward: District 4 Wildlife Biologist Fidorra and Region 3 Private Lands Biologist Hulett worked with regional staff members on plans for a pilot Fuel Break Project in the Blackrock area. The area has seen large and frequent fires, which prevent habitat enhancement of this important landscape for shrub-steppe connectivity. Hulett and Fidorra spoke with potential funding partners and met with landowners and on site to discuss implementation along Highway 241 and Highway 24. Approximately six miles of green strips will be planted this fall, utilizing established brown strips along the highways. These landowners are excited about this project and are hoping to add more of these across their lands if the present project is successful.

Habitat Opportunities in Kittitas County: Region 3 Private Lands Biologist Hulett spoke with Area Habitat Biologist Nelson about working with private landowners in Kittitas County. Nelson has been contacted by landowners about ways to add habitat to their land, as well as ways to protect their lands from becoming developed by wind or solar energy companies. Hulett and Nelson plan to meet towards the end of August and tour sites in Kittitas County that are looking for assistance.

A lightning-caused wildfire began burning on the south side of Umtanum Ridge of the Wenas Wildlife Area the morning of July 24. It was named the Pipeline fire due to its proximity to the underground natural gas pipeline that runs through the wildlife area. The fire was difficult to fight initially, due to the limited ground access and lack of available aerial resources, which were allocated to other lightning-caused fires in the area. By afternoon, several helicopters, retardant tankers, and small water drop planes were working the fire, along with ground crews, as it pushed south towards Cottonwood Creek drainage. Level two evacuation notices were given to homes south and west of the fire. The southward movement was stopped the first evening when cooler temperatures and rising humidity gave firefighters a chance to get ahead of it. On day two, winds the fire pushed north to the top of Umtanum Ridge, also pushing on the northwest and northeast flanks. Ground crews, dozers, and air resources did a great job holding it until evening came with its cooler temperatures and humidity. By day three, fire lines were established around the north end of the fire and all of the lines held during a wind event that evening. Crews are now mopping-up and patrolling the fire for hotspots. A good portion of the fire burned through areas of high quality shrub-steppe. Total acreage of the fire is estimated at 6,515 acres.



Pipeline fire on Umtanum Ridge spreading south, July 24 at 1:30 p.m.



Fire burning across Buffalo Ridge towards Cottonwood Creek, July 24 at 6:30 p.m.



Fire burning across Buffalo Ridge towards Cottonwood Creek, July 24 at 9:00 p.m.



Fire burning up Umtanum Ridge, July 25 at 2:00 p.m.



Upper end of Roza Creek drainage , July 25 at 3:30 p.m.

5) Providing Education and Outreach

Nothing for this installment.

6) Conducting Business Operations and Policy

Sunnyside Wildlife Area Assistant Manager Ferguson and Manager Kaelber participated in two planning meetings with Ducks Unlimited to facilitate the installation of new water control structures at the Sunnyside and Windmill units. The site at the Sunnyside Unit is currently

flooded more than usual driving up the cost of contractor bids. Ferguson has identified the issue causing the flooding and will work to relieve the flooding and dry out the area early next week.

7) Other

Nothing for this installment.

REGION 4

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

July Mountain Goat Releases: The July mountain goat releases ended on a great day where goats were flown into great high elevation habitat. Just over 75 goats were released into the North Cascades from Olympic National Park. A few kids made the trip with their mothers. Goats were transported in individual crates by helicopter and released together. Each goat is equipped with a radio collar so their movements can be tracked as they explore their new homes.



Biologist Hamer holds a young kid while readying its mother for release

Mountain goat making sure the driver knows where he is going



A crate holding a mountain goat arrives by air to the alpine release site



Assistant District Biologist Hamer and Private Lands Biologist Wingard releasing kids with nanny mountain goats while Mountain Goat Specialist Harris looks on



District Biologist Milner and Private Lands Biologist Wingard releasing the last mountain goat of the day

2) Providing Recreation Opportunities

Nothing to report this period.

3) Providing Conflict Prevention and Education

Nothing to report this period.

4) Conserving Natural Landscapes

Leque Island Estuary Restoration Project: Construction began on the Leque Island Estuary Restoration Project. Strider Construction, based out of Bellingham, was awarded the construction contract and will complete the project prior to November 15, 2019. The Capital Asset Management Program (CAMP), regional staff members, and Ducks Unlimited are working together to manage construction with Strider. The site is currently closed to the public and will reopen when the project is complete.



An excavator digs a tidal headwater area on the site that will eventually connected to the tides



Strider's construction superintendent and the WDFW/Duck's Unlimited project team discuss the plan for dike removal

Lopez Island Deer Presentation: Biologist Milner gave a presentation to the public on the impacts of the high numbers of deer to habitats and other species on Lopez Island. The talk was well attended and we had a lively discussion about options for reducing their numbers and protecting other native species. We also shared our many values regarding deer and wildlife on the islands and acknowledged that all of us must respect varying perspectives on deer

management. This year, WDFW is able to pay landowners for hunting access, if their property is appropriate for hunting. Foremost in evaluating potential properties is safety and each site will be visited by WDFW Private Lands access personnel to assess suitability.



Examples of conifer trees that have been heavily browsed by deer on Lopez Island

Litter Cleanup and Prevention: Private lands personnel in Region 4 collaborated again with Sierra Pacific Industries staff members to remove another garbage dump. WDFW provided a dump trailer and time, while Sierra Pacific Industries provided dump fees and time.

5) Providing Education and Outreach

Gravel Removal and Storage: Private lands staff members assisted Whatcom Wildlife Area personnel in moving gravel road material from a construction road on the wildlife area to a storage location. The gravel will be used to improve parking at several sites over the next several hunting seasons.



6) Conducting Business Operations and Policy

Nothing to report this period.

7) Other

Nothing to report this period.

REGION 5

1) Managing Wildlife Populations

Western Pond Turtle Treatment: Biologists Bergh, Wickhem, and Burlingame trapped western pond turtles in search of candidates for shell disease treatment. In total, 13 turtles with shell disease were transported to the Oregon Zoo where they will undergo surgical treatment. Treated turtles will remain in captivity until next spring when they will be released after fully healing.

Western Pond Turtle Nesting: Biologists Burlingame, Bergh, and Wickhem, along with volunteers Stark and Staihar, wrapped up a two month effort to find western pond turtle nests. Eighteen radio transmitters were placed on adult female turtles, which were then monitored daily in order to track females to their nests when they left their ponds. Ten nests were found containing five to eight eggs per nest, with one additional nest being predated by a ground squirrel almost immediately after being laid. Wire mesh enclosures were placed over the 10 nests for protection from predators. These nests will be excavated again in the fall to determine nest success and the number of hatchlings, a portion of which will go to the Oregon Zoo and be put into the head start program.



A female western pond turtle, with radio-transmitter, digging a nest



Biologist Burlingame excavating a recently laid nest



Recently laid Western pond turtle eggs, ready to be reburied after excavation

Western Gray Squirrel Statewide Survey: Assistant Manager Steveson performed the first inspection on transect 27 of the western gray squirrel population distribution study located on the Soda Springs Unit of the Klickitat Wildlife Area. Several hair snag tubes within the transect had squirrel detections. Once the hair samples were collected, the hair snag tubes were reset and bated. The collected hair samples were transferred to the District Biologist to be submitted for positive identification. While checking transect 27, Steveson had an unlucky run in with a rattlesnake that for no good reason seemed to be very irritated. Assistant Manager Steveson with the help of Biologist Burlingame set up transect 92 of the western gray squirrel population distribution survey on the Mineral Springs Unit of the Klickitat Wildlife Area. After acquiring permission to drive across a parcel of Columbia Land Trust property, access to the transect was relatively easy and set up went smoothly.



One very irritated rattlesnake in the middle of transect 27

Western Gray Squirrel Statewide Survey: Over the past two weeks, Wildlife Biologists Wickhem and Bergh and Habitat Biologist Johnson performed their second 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 the second round of checks, we have confirmed western gray squirrel hair at five sites! The transects will be checked once more over the next six weeks. In addition, biologists and Burlingame deployed five additional transects, and Biologist Linders confirmed occupancy at another transect by locating two, large western gray squirrel nests at a transect site. 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>.



Set and baited squirrel tube



Western gray squirrel hair left on double-sided tape

Bat Emergence Counts: This week, Biologist Wickhem and volunteer Hadley conducted bat emergence counts at three sites one in each county of District 9. In Clark County, along with White-Nose Syndrome Coordinator Tobin and volunteers from Bats Northwest, the team counted 267 bats total exiting from several bat houses on private property. In Skamania and Klickitat counties, Wickhem and Hadley were joined by U.S. Forest Service Biologists Chartier and

DeShong to count 101 bats at a site near Trout Lake and 435 bats at a site outside Carson. At each site, an acoustic detector was set up to record the echolocation calls, which is used to identify which species of bats are roosting in the colonies. In the future, these three sites will be considered for formal monitoring, and samples will be taken to test for presence of the *Pd* fungus (*Pseudogymnoascus destructans*) that causes white-nose syndrome in bats.



Volunteers from Bats Northwest preparing to count bats as they exit from bat boxes at a private residence in Klickitat County



Volunteer Hadley ready to count bats as they emerge from an abandoned building in Clark County

Monarch Butterfly Surveys: Over the last two weeks, Biologists Wickhem and Burlingame as well as volunteer Anderson have conducted seven monarch butterfly surveys at known milkweed patches in Klickitat County. Monarch populations across the western United States have dramatically decreased over the last few years, so the team was tasked with relocating previously documented monarch breeding locations to look for adult monarchs and evidence of breeding

(eggs, larvae or pupae). Despite surveying thousands of milkweed plants, the team was unable to find any monarchs. We are hoping for more success during the second round of surveys at the end of August.



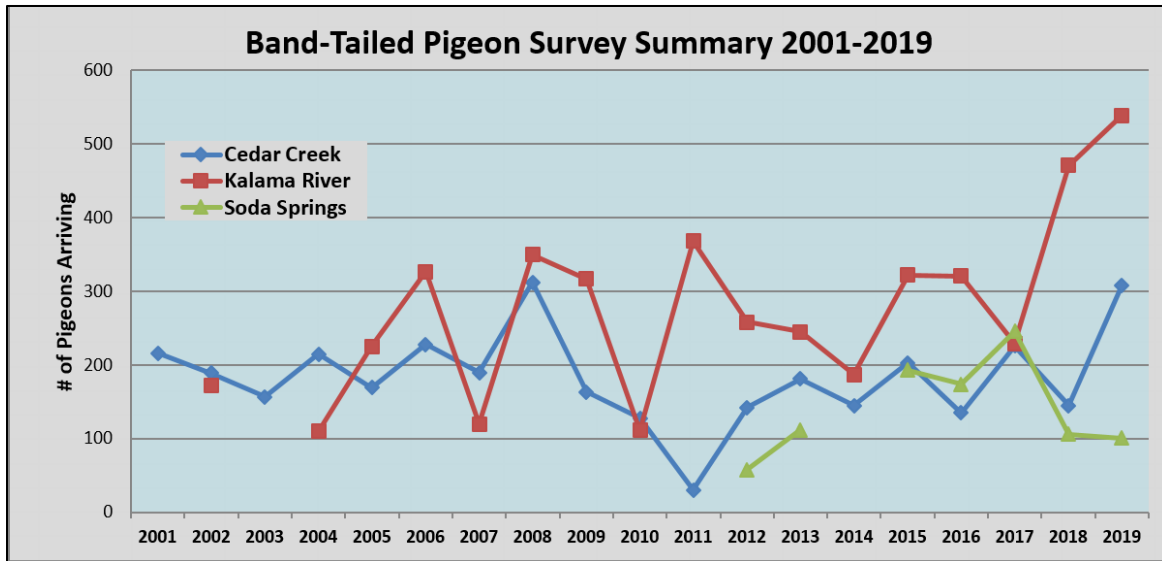
Large patch of narrow-leaved milkweed (Asclepias fascicularis) and a view of Mount Hood



Showy milkweed (Asclepias speciosa) in bloom

Band-tailed Pigeon Surveys: Biologist Holman completed the annual band-tailed pigeon mineral site surveys at the Kalama River and Soda Springs sites. Biologist Wickhem conducted the survey at the Cedar Creek Wildlife Area. Mineral sites throughout the range of the Pacific

Coast population of band-tailed pigeons in western Washington, Oregon, California, and British Columbia are surveyed this time of year to index abundance and allow wildlife managers to monitor the population trends of this game species. Survey results were strong for the local sites this year, highlighted by a record count of 539 at the Kalama River site.



Band-tailed pigeon mineral site survey summary for Cedar Creek, Kalama River and Soda Springs

Band-tailed Pigeon Survey: Biologist Bergh conducted the annual band-tailed pigeon mineral spring site survey on the Wind River. After being rained out twice, the weather was perfect and a similar number of birds to 2018 were counted. Ospreys had built a nest in a tall tree above the east-shore mineral spring site and flew low around both the west and east shore mineral sites several times, disturbing the pigeons. The results from these surveys in Washington are used by the Pacific Flyway Council to determine harvest regulations for band-tailed pigeons (<http://pacificflyway.gov/>).



Band-tailed pigeons in a staging tree above the mineral site

Black-tailed Deer Buck Captures. Biologists Holman continued attempts to capture black-tailed bucks for the buck mortality research project. Attempts were made in GMU 672 (Fall River) in concurrence with bear population monitoring work, as well as in GMU 568 (Washougal). This week a new method was successfully used to capture a buck. Specifically, a suspended net gun, which shoots a net down on deer that have been attracted to bait. Thanks to Wildlife Area Manager Hauswald for assistance on the buck capture.



Wildlife Area Manager Hauswald with a black-tail captured by suspended net gun

In addition, Regional Wildlife Program Manager Jonker joined Biologist Holman for a final attempt to capture black-tailed bucks for the buck mortality research project. The final try was made in GMU 568 (Washougal). Five different bucks entered the young forest stand where the attempt was made, which provided for an exciting evening. However, none visited the bait under the net gun nor came within the limited range of a dart gun. Thanks to Regional Wildlife Program Manager Jonker for assistance on the buck capture.

Raptor Rescue: Biologist Wickhem and Wildlife Conflict Specialist Jacobsen responded to a call about an injured hawk at a residence outside Goldendale. The hawk had been on the person's property for two days and could only hop or fly a few feet into the air. Wickhem and Jacobsen were able to safely capture the juvenile red-tailed hawk, and it was transported to a rehab facility.



Wildlife Conflict Specialist Jacobsen after safely capturing the juvenile red-tailed hawk

2) Providing Recreation Opportunities

Access Sites: Access staff members Rhodes and Mckinlay conducted weed eating, hedging, and backpack blowing at many sites with particular emphasis on the Mineral Lake upper access site. Excessive trash dumps were removed from Vancouver Lake as well as painting speed bumps entering the site, painting ADA emblems, and resetting the curb parking that was loose. Both Rhodes and McKnlay received compliments this week on the great work they are doing on the access sites. People are really noticing the terrific work this great team is doing and relaying that several sites like Modrow Bridge and Kress Lake have not looked this good in a long time!



Rhodes and McKinlay keeping the access sites trimmed, safe, and clean

3) Providing Conflict Prevention and Education

Elk Damage: Wildlife Conflict Specialist Jacobsen began receiving several elk damage complaints around the region as the elk return to crop fields after calving and spring green-up. Jacobsen will continue to work with these agricultural producers to deter elk damage.

Landowner Meetings: Wildlife Conflict Specialist Jacobsen met with several landowners Klickitat County to discuss elk damage to hay crops and pasture land, and will continue to work with the producers to deter damage caused by elk.

Cougar Sighting Reports: Wildlife Conflict Specialist Jacobsen worked with WDFW Enforcement to field several cougar sighting reports and reports of suspected cougar noises around the region.

Injured/Stuck Deer Reports: Wildlife Conflict Specialist Jacobsen also fielded several different reports of deer with injuries or deer that were stuck in fences throughout the region.

4) Conserving Natural Areas

Klickitat Wildlife Area Grazing Monitoring: Assistant Manager Steveson checked for grazing activity on the Fisher Hill and Dillacort Canyon units. He observed very light or no signs of cattle on two properties where permitted grazing occurs. He checked one parcel to see if cattle are trespassing on an unpermitted area. No evidence of grazing was found. In addition, Assistant Manager Steveson made a trip to the Simcoe Mountains Unit to check on the distribution of

cattle. He found that the animals have moved to all expected locations on the permitted grazing area.

Klickitat Wildlife Area Simcoe Unit Reconnaissance: Wildlife Area Manager Van Leuven and Wildlife Program Manager Jonker visited the Simcoe Mountains Unit to evaluate current road conditions, check for active road use at the north edge of the unit, and strategize on the implementation of the fencing project. Several species of wildflowers were noted, as well as the butterflies and bees that were visiting them. The white butterfly is tentatively identified as a checkered white, and the orange butterfly is tentatively identified as a painted lady. Deer and chipmunks were also active and observed.



(Top left) Bees on nettle leaf horsemint; (Top right) Butterfly on stonecrop; (Bottom) Buckwheat and butterfly

Klickitat Wildlife Area Weed Control: Assistant Manager Steveson spent two days applying herbicides on the Sondino Ponds Unit, specifically focusing his efforts on controlling the spread of rush skeleton weed. A few new small groups of yellow star thistle were discovered and treated. The overall occurrence of rush skeleton weed on the Sondino Ponds Unit does seem to have diminished for the time being. In addition, perennial and seasonal ponds on the Soda Springs Unit are monitored annually for presence of reed canary grass, an aggressive weed that can displace most native grasses and forbs. Assistant Manager Steveson treated patches of canary grass around five ponds with a wetland-approved herbicide this week. Water levels are usually low at this time, making it possible to spray the grass while it is above the wetted shoreline of the ponds and thereby avoid getting herbicide in the water. Steveson also treated sulfur cinquefoil and rush skeleton weed on the Sondino Unit, and Canada thistle on the Simcoe Mountains Unit this week. Manager Van Leuven made arrangements for a contractor to spray a field that is heavily infested with rush skeleton weed. This job is too extensive for wildlife area personnel to take on.

Cowlitz Wildlife Area Peterman Roadside Mowing: There are approximately 75 miles of roads on Peterman and, except for times of high fire danger, year-round vehicular access is allowed on nearly 26 miles. Mowing is essential to help control annual weeds as well as provide some security against vehicles causing unintended fire ignitions from hot exhausts. Wildlife area personnel are currently conducting mowing activities on this unit.



Peterman road vegetation before mowing



Peterman road vegetation after mowing

REGION 6

HERE'S WHAT WE'VE BEEN UP TO:

1) Managing Wildlife Populations

Band-tailed Pigeons: Biologist Michaelis completed three band-tailed pigeon (BTP) mineral spring surveys. Two surveys were conducted in District 15, and one in District 17. The United States Fish and Wildlife Service keeps long-term population trend indices in two other Pacific Coast states and the Province of British Columbia. These data are used from Washington and

modeled in order to estimate change in population trend, which then direct season bag limit and length.

Raw count data from the three sites surveyed in 2019 were high compared to 2017-18 (See below).

Table 1. Raw count data from three mineral sites surveyed in Region Six (2017- 2019).

Mineral Site	2017	2018	2019
Naselle	37	42	216
Lilliwaup	143	292	371
Potlatch	396	556	703

While conducting these BTP surveys, Biologist Michaelis observed some interesting peregrine falcon activity, which affected the behavior of pigeons visiting a mineral site. One female peregrine was observed to nearly catch a kingfisher along Hood Canal.

Biologist Tirhi completed the Mud Bay band-tail survey for 2019. A high count of 594 pigeons over the seven-hour survey is the highest count the site has had since 2001. Counts at other mineral sites have also been high this year so this should be a great band-tail hunting year.

Next year, regional staff members will capture and attach satellite telemetry devices to band-tailed pigeons for the purpose of detecting new mineral sites in areas where no mineral sites are currently known to occur.

Black-tailed Buck Survival Study: Efforts continued to capture and attach GPS tracking collars to black-tailed bucks in western Washington. This study began in 2017 in order to provide estimates of annual buck survival and ultimately produce more accurate population estimates. District 17 staff members, with assistance from District 10, have collared two bucks in GMU 672 this season. Telemetry from the last two weeks show both animals in close proximity to their capture sites.

Biologists Butler, Michaelis, and volunteer Terry attempted to capture black-tail deer for the buck survival estimation study within Thurston County. While many deer were observed during the morning, evening, and at night, a majority were does with only a few bucks seen each time. One attempt was made to dart a buck, but it was too long of a shot.



Biologist Novack with a small black-tailed buck captured early July in GMU 672

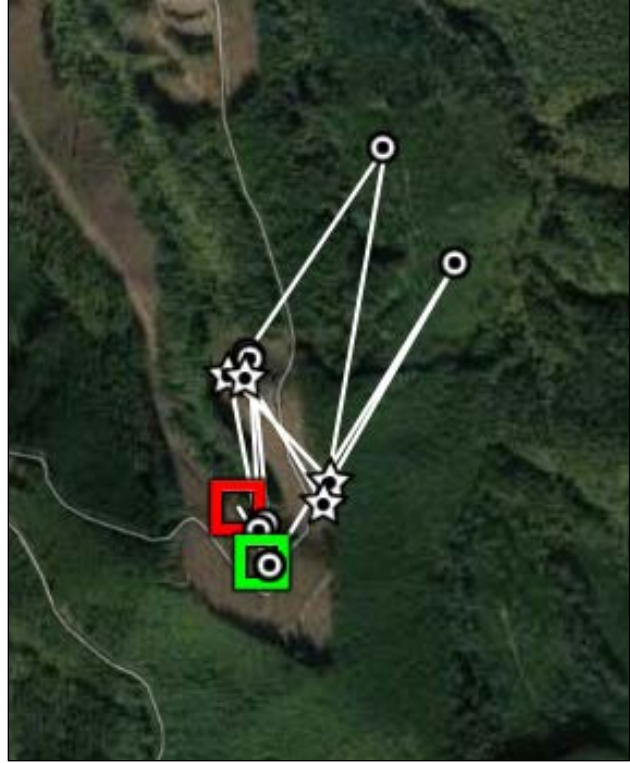


Image shows black-tailed buck locations and direct line connections between consecutive points for a two week period in District 17

While deploying wolf cameras in the Carbon and White River drainages, Biologist Tirhi and volunteer Terry also searched for black-tailed bucks to dart. Unfortunately, both drainages have a very low density of deer and none were seen over the two and a half days of camera work. Deer collaring attempts are officially over in District 11. This is because we are one month away from opening archery season and the WDFW policy is to have no animals on the landscape with drugs in their system within one month of any hunting season for that species for human safety.



Black-tailed deer doe spotted while searching for a buck

Black Bear Population Monitoring in Willapa Hills: Region 5 and Region 6 staff members removed the barbed wire corrals and compiled all the data and samples needed to conclude the field portion of black bear population monitoring in Game Management Unit (GMU) 672 (Fall River). The monitoring effort involved constructing 36 barbed wire enclosures or stations. A single corral was located within a one square kilometer cell. Each cell was adjacent to one or more additional cells when placed across the landscape. The individual stations were baited with blood and fish oil to draw bears into the enclosures. When accessing the attractant, the bears would leave hair on the wire barbs. Each station was revisited and rebaited four times during the spring/summer survey period. Bear hair collected from the barbs will be sent for DNA analysis to identify the total number of individual bears in the area and to 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 occurred concurrently 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.

Western Pond Turtle: The 2019 western pond turtle nest monitoring concluded this month at the Pierce County recovery site. The last week of monitoring was slow with no turtles with transmitters discovered out of the ponds. After monitoring 25 adult female western pond turtles this nesting season, a total of 22 nests were located. Six of those nests were delivered to the Woodland Park Zoo to support head-starting efforts and sixteen nests remain in the ground. These nests will incubate naturally as part of a project assessing the effect of shell disease on reproduction and will be excavated next spring when the hatchlings begin to emerge. Thank you to all the volunteers helping this turtle season!

Biologist Butler and Tirhi worked with Woodland Park Zoo staff members to process 48 juvenile western pond turtles. Hatched at the Woodland Park Zoo last year, these turtles grew all winter long in a warm, predator free environment. This allowed these turtles to grow significantly more than they would in the wild, which helps them to avoid predators like invasive bullfrogs.

During processing, biologists filed notches into the marginal scutes of the turtle's carapace corresponding to a numerical code. This method provides a permanent means of marking each turtle with a unique identification number and enables biologists to track these turtles in the future. Woodland Park Zoo staff members and interns assisted with measuring, weighing, and photographing each turtle. The majority of these turtles are set to be released in August at the Pierce County recovery site.



Biologist Butler and Lead Animal Keeper Miller collecting western pond turtles for notching



Woodland Park Zoo interns helping with western pond turtle processing

Western Gray Squirrel: Biologist Butler worked with Research Scientist Vanderhaegen to set up and check three western gray squirrel transects. Each transect is comprised of two points with four hair tubes deployed at each point. These hair tubes have a walnut glued in the center and double-sided tape adhered to plates situated at the top of the tube entrances. In addition, walnuts are placed just outside the tube in hopes to lure a western gray squirrel into the tube where the tape can capture a hair sample. The hair is then used to identify the presence of a western gray squirrel. Two weeks after deployment, all 24 tubes were checked and four tubes were found with identifiable hair. One sample was confirmed to be from a western gray squirrel, with the other three found to be from Douglas squirrels. The western gray squirrel is listed as threatened in Washington. This work is part of a statewide study assessing the current range of the western gray squirrel in Washington.



Biologist Butler checking a western gray squirrel hair tube



Reset western gray squirrel hair tube after checking

Cougar Management: Biologist Tirhi represented District 11 at third internal cougar management working group meeting held in the Teanaway. The group has been assigned by the director to review/analyze our cougar management guidelines and improve or replace, as necessary. The group was able to progress to agreeing to the contents of new cougar harvest management guidelines. Tirhi was asked to participate on a subcommittee of this committee that will refine the draft guidelines for the committee and agency review.

Wolf Monitoring: Biologist Tirhi and volunteer Terry deployed four trail cameras in the Carbon River area and three cameras in the White River area for wolf monitoring. Limited sporadic reports from the public have come into WDFW regarding possible wolf sightings in these two areas. Both areas are remote with good topography for wolves and significant game (deer and elk) so the likelihood of wolves eventually occupying these areas is reasonable. District 11 staff members will rotate these cameras throughout these two areas over the coming years in the hopes of capturing wolves on film if/when they do make their way in.



Wolf monitoring cameras in the Carbon and White River drainages

Bat Monitoring: Biologist Tirhi and two landowners conducted a bat emergence count on a site suspected of hosting a colony of bats. In 2018, the landowner found 10 dead bats in his driveway and reported to WDFW. The landowners were gracious enough to volunteer to assist Tirhi with a count of their cabin which contained guano and whose attic space may possibly have housed the colony. Unfortunately, only six bats were counted emerging from the site suggesting this may be a day roost for a few bats but is not the type of larger colony WDFW is interested in long-term monitoring for white-nose syndrome (<https://wdfw.wa.gov/species-habitats/diseases/bat-white-nose>) and population monitoring.



Biologist Tirhi's truck posed outside a cabin on Lake Tanwax suspected of supporting a colony of bats. Acoustic monitor attached to tripod for species recording and recognition.

2) Providing Recreation Opportunities

Nothing to report this period.

3) Providing Conflict Prevention and Education

Nothing to report this period.

4) Conserving Natural Landscapes

Mazama Pocket Gopher Recovery and Working Farms: Biologist Tirhi worked with Natural Resources Conservation Science (NRCS) partners to conduct a baseline vegetation inventory of a working farm (hayed annually) in the Tenino area on which WDFW purchased a conservation easement (CE) for the recovery of pocket gophers. The findings of the inventory along with soil sample data from samples Tirhi and Butler are collecting next week will inform the site management plan that Tirhi is completing as required by the easement acquisition funder, USFWS.



NRCS staff members Swotek and Cheney along with two NRCS interns conducting vegetation inventory on Mazama pocket gopher conservation easement property and picture of hayed property

WDFW Wildlife Area Management Planning—Scatter Creek Complex: Biologist Tirhi represented District 11 in the second all-day meeting to draft the Scatter Creek Wildlife Area Complex Management Plan. The focus of the meeting was to review the vision of this wildlife area, review species sheets created by the district biologists for each of the units in this complex,

review the writing assignments for each of the staff members for completion of the management plan, and begin to craft objectives/measurable/tasks for various issues raised during the scoping meetings. To learn more about this wildlife area and get involved go to <https://wdfw.wa.gov/places-to-go/wildlife-areas/scatter-creek-wildlife-area>

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.