Wildlife Program – Bi-weekly Report

Feb. 16 to Feb. 28, 2019

SCIENCE DIVISION

Managing Wildlife Populations

Predator-Prey Project – **Cougar Research:** Research Scientist Kertson continued capture efforts in Game Management Units (GMUs) 117 and 121 in support of cougar research efforts for the Predator-Prey Project. Conditions on the ground were excellent and the team located tracks from numerous cougars throughout the week. The team successfully captured and outfitted four cougars with GPS radio collars. These captures pushed the total number of cougars captured in the Northeast study area of the Predator-Prey Project to 28, with 23 individuals currently alive and providing data. Capture efforts for the season will wrap up in late March.



An adult male cougar captured in GMU 121 for the Predator-Prey Project

Predator-Prey Project – **Ungulate Research:** WDFW and University of Washington (UW) researchers captured and collared 11 adult female white-tailed deer in GMUs 117 and 121. These deer joined 31 adult does and 23 fawns that were collared this winter for the Predator-Prey Project. Deer capture crews successfully deployed all the fawn collars, and they intend to continue capture efforts for adult does through March.



Two white-tailed deer snack on alfalfa and contemplate entering the trap

Pygmy Rabbit Field Survey Form Updates: Information Technology (IT) Specialist Simper worked to convert existing electronic data forms for upcoming spring captures of pygmy rabbits from the "iForms" system to the "Survey123" system. The Survey123 mobile app is integrated with the ArcGIS Online platform and is now fully featured and stable enough to support these types of complex data forms, which could previously only be represented using the "iForms" product. In addition to updating the forms, the associated data transfer scripts are also being updated to utilize newly available Python code libraries, which will also provide a basis for developing other upcoming projects.

Providing Recreation Opportunities

Follow up Survey of Big Game Hunters: The annual phone survey of big game hunters failing to report their hunting activities was completed on Feb. 28. Our partners at Washington State University's Social and Economic Sciences Research Center interviewed over 5,000 hunters, collecting 9,987 reports of hunting deer, elk, black bear, and turkey (also one moose). Biometrician Keren and Data Developer Whelan will spend the following weeks compiling and analyzing this data to provide district staff members and game managers with a better picture of efforts and success rates of big game hunters in 2018.

Harvest Estimates: IT Specialist Whelan improved the code and overall workflow that builds the Big Game Harvest Estimates in preparation for our production analysis. In collaboration with Biometrician Keren, ensuring the scripts are handling the data processing correctly and that the estimator is working as expected, giving decision-makers and the public the best possible estimate of harvest in 2018.

Providing Conflict Prevention and Education

Nothing for this reporting period.

Conserving Natural Landscapes

Nothing for this reporting period.

Providing Education and Outreach

Disseminating Results at a Scientific Conference: Research Scientist Vander Haegen attended the joint meeting of the Washington State Chapter of The Wildlife Society and the Society for Vertebrate Biology, presenting a paper titled "Using citizen science to inform species distributions: Washington's sagebrush songbird survey".

GoHunt is Going Away: After over 10 years in service, the GoHunt webmap application will no longer be available when the WDFW new website is launched. Version 3 of the Hunting Regulations Webmap will provide the same information as GoHunt (and more) and can be accessed on the WDFW Hunting Regulations and Seasons webpage. This map will be refreshed with new hunting data at the same time as the April 2019 big game hunting pamphlet release.

Conducting Business Operations and Policy

Nothing for this reporting period.

Other

Recognizing the Passing of Colleagues: Research Scientist Schroeder published two "In Memoriam" articles in Auk: Ornithological Advances. The first was titled "David Archibald Boag, 1934–2017" and the second was titled "Fred C. Zwickel, 1926–2018". Fred was a former employee with the Department of Game (1950–1961). Both were colleagues of Research Scientist Schroeder during past research on grouse.

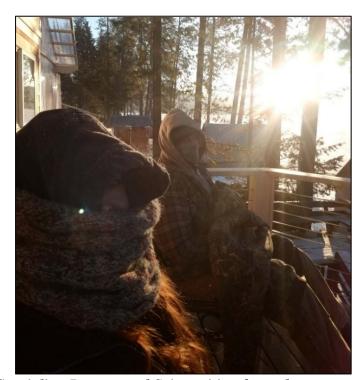
REGION 1

Managing Wildlife Populations

Turkey Removals in Stevens County: Wildlife Conflict Specialists Bennett and Seitz continued trapping and relocating turkeys in Loon Lake. Three additional turkeys were moved.



Turkey located in Loon Lake near a trapping location



Wildlife Conflict Specialists Bennett and Seitz waiting for turkey to enter a live trap in Loon Lake at sunrise and 12 degrees below zero

Wolf Track Surveying: A wildlife conflict specialist and district biologist surveyed the northern part of the Five Sisters pack territory for wolf tracks. The only tracks found were from moose, deer, cougar, and bobcat.

Deer Trapping: Wildlife Conflict Specialist Westerman assisted Dr. DeVivo with white-tailed deer captures for the predator-prey research project.

Mule Deer Captures: Biologists Wik and Vekasy worked with a contracted capture crew to capture and radio collar 48 mule deer does in the northern portions of District 3 from Feb. 14 to 16. Since the capture, three collared animals have died, two of which may be capture related and a third was a very old doe who was in bad condition and was killed by coyotes. The goal of the study is to monitor deer survival and evaluate migration patterns within the study area. Migration patterns will help in determining the extent of survey areas and improve permit distribution on the landscape.

Winter Mortality: Ungulates along the Grande Ronde are faring poorly this winter due to the heavy late snow. On Feb. 27, District Biologist Wik responded to the Grande Ronde River, in the area of the 4-O Ranch Unit, to reports of two elk that could not stand up. Both elk were extremely emaciated and in the late stages of starvation. A third elk, a yearling bull, was found a couple of miles away that had died the night before from starvation. Due to the poor condition of the animals in the area, Wildlife Program personnel in District 3 are recommending the closure of the local wildlife areas to human entry to reduce future disturbance by people.



Cow elk who could no longer stand up

White-tailed Deer Trapping: District 1 Wildlife Biologist Turnock, along with other regional staff members caught and collared white-tailed deer does and fawns as part of the predator-prey project. WDFW personnel used several methods to capture white-tailed deer in February, including a new tool, the suspended net gun. A net is suspended above a bait pile that attracts deer, when deer are underneath the net biologists can deploy the net so that it falls on top of the deer, the deer become tangled and WDFW personnel can catch and collar the caught deer.



Natural Resource Technician Seitz and Wildlife Biologist Lowe restrain a white-tailed deer entangled in the net of the suspended net gun

White-tailed Deer Trapping II: Water Access Manager Dziekan helped Ungulate Research Scientist DeVivo with white-tailed deer trapping efforts; University of Washington (UW) technician Eric Jolin also joined them. The three of them checked clover traps in GMU 117 for deer. One pregnant doe was fitted with a Vaginal Implant Transmitter (VIT) and collar, and one male fawn was collared.



Manager Dziekan and UW Technician Eric Jolin released a male fawn after recording data and collaring. The blindfold was removed at the same time as the hobbles, and the deer hopped away happily with some new jewelry - Photo by Dr. Melia DeVivo, WDFW

Aerial Moose Surveys: Wildlife Biologists Prince and Turnock conducted two days of surveys to collect moose composition data. Biologists use this survey data as part of a larger picture to inform harvest management.



Wildlife Biologist Prince surveys for moose in District 1 from the front seat of the helicopter

W.T. Wooten Wildlife Area Bighorn Sheep Monitoring: Assistant Wildlife Area Manager Dingman located the bighorn sheep and submitted the locations using Survey123.

Asotin Creek Wildlife Area Trail Camera Pictures: Biologist Woodall retrieved a trail camera from Smoothing Iron Ridge that had many pictures of elk on it. Also photographed were numerous coyotes.



Dancing cow elk at Smoothing Iron Ridge

Providing Recreation Opportunities

New Contracts Entered into NOVATUS: Private Lands Biologist Thorne Hadley entered two new access contracts into NOVATUS. One contract was Feel Free to Hunt for a property in Walla Walla County for 1,277 acres and the second was Hunt with Written Permission in Walla Walla County for 960 acres.

Bobcat Pelt Seals in Pend Oreille County: Wildlife Conflict Specialist Bennett met with a trapper to seal eleven bobcat pelts for an upcoming sale.

Hunter Access: Biologist Baarstad continued to collect permission slips from Lincoln County landowners enrolled in the Hunt by Written Permission program. Biologist Baarstad returned two calls from hunters inquiring about spring turkey hunting opportunities in District 1.

Hunting by Written Permission Slips: Private Lands Biologist Thorne Hadley met with a landowner enrolled in WDFW Hunt by Written Permission who stopped by the office to drop off their portion of the Hunt with Written Permission slips they gave out to hunters for this past hunting season. Private Lands Biologist Thorne Hadley contacted three landowners who have not yet turned in their slips.

Novatus Contracts: Private Lands Supervisor Earl worked with Contracts personnel in Olympia to finalize two contract updates for property in Asotin County. The amendments were approved and Earl will be meeting with the cooperators to have them signed.

Private Lands Hunting Access Website: Private Lands Supervisor Earl worked with the Garfield County Assessor's Office to clean up an east/west border between landowners. Earl made changes to the current map on the Private Lands Hunting Access site.

Hunting by Written Permission: Private Lands Supervisor Earl continues to contact and meet with cooperators to collect permission slips from the 2018-19 hunting season.

W.T. Wooten Wildlife Area Lake and Campgrounds Status: Many lakes are opening for fishing on the W.T. Wooten Wildlife Area on March 1. However, winter may have something to say about that. Just about all of the lakes are frozen over, which has prohibited hatchery personnel from stocking them with trout. There was anywhere from 18 inches to over two feet of snow in the campgrounds as of Feb. 27, with more snow in the immediate forecast. Planned operations to apply gravel on the new west dam of Rainbow Lake and the lower part of Campground 3 has been postponed until the snow melts.



Snow near Campground 3 next to Rainbow Lake



Snow on Tucannon Road near Camp Wooten

Providing Access to Land: Snow plowing seems to be the primary activity this February. Wildlife Area Assistant Manager Daro Palmer maintained snow removal at parking areas on Sherman Creek Wildlife Area, and Pend Oreille County Public Works maintained snow removal at the Beaver Creek parking area at Rustlers Gulch Wildlife Area. Winter recreationists use both areas for cross-country skiing and snowshoeing. Snowshoers have a loop trail at Rustlers Gulch from the Beaver Creek parking area down to the West Branch Little Spokane River.



A view of the river from a spur off that loop trail

Kettle River Access Development: As part of the development of the parking areas on the Kettle River Water Access Sites, Curlew Job Corps will be constructing and installing information kiosks for each parking area, and assisting with construction of a wildlife view blind on the northern site. WDFW's Capital Asset and Management Program (CAMP) has the development work planned for May-June 2019.

Providing Conflict Prevention and Education

Grande Ronde Elk: Wildlife Conflict Specialist Wade spoke with the producer, who owns hay stacks on the Grand Ronde River, about the elk issues he was experiencing. The producer was very grateful for the quick response from Wade and Natural Resource Technician Heitstuman and reported that the joint hazing efforts had pushed the elk far enough away that they are currently not damaging the hay stacks. With the current forecast of more snow over the next weeks, Wade and Heitstuman will continue to check the area and haze the elk if necessary.

Cougar in Barn: Wildlife Conflict Specialist Rasley responded to a call of a cougar that was hiding under a cattleman's barn just south of Walla Walla. Several cougar tracks were located going into the barn. The producer and Rasley were able to see the cougar for a brief moment under the flooring and that is when the cougar crawled up into a hole in the floor of the barn. The barn was right in the middle of his calving operation, which generated concern for the livestock. The cougar finally was tired of the hazing efforts and seemed to have left the building. Rasley and the producer will continue to monitor the area to see if the cougar returns.



Area under the barn and tracks leading to the crawlspace

Injured Deer Removal in Stevens County: Wildlife Conflict Specialist Bennett and WDFW Enforcement Officer Konkle euthanized a severely injured doe with several compound fractures.



A white-tailed deer euthanized with severe compound fractures to both rear legs

Wildlife Damage Permits: Natural Resource Technician Seitz received several harvest reports from hunters using Damage Prevention Permits.

Turkey Complaints: Natural Resource Technician Seitz spoke with several landowners from Stevens and Pend Oreille counties about turkey mitigation techniques.

Turkey Trapping: Natural Resource Technician Seitz and Wildlife Conflict Specialist Bennett continued to trap and relocate turkeys to Sherman Creek Wildlife Area.

Turkey Issues: Wildlife Conflict Specialist Westerman talked to a landowner who has been dealing with turkeys getting into his hay. Westerman talked to him about ways of mitigating the damage and reached out to National Wild Turkey Federation for assistance. Westerman will follow up next week.

Elk Damage: Wildlife Conflict Specialist Westerman met with a landowner who has been having elk damage to his silage. Westerman recommended the use of a master hunter, damage permit holder to help mitigate the damage.

Deer Damage to Winter Wheat: Wildlife Conflict Specialist Rasley toured the deer damage with a farmer just south of Dayton. We were able to haze the deer away from his wheat with the use of cracker shells. The farmer did not want to shoot any of the deer but was requesting some assistance with his hazing efforts.



Hazing equipment for the day

New Damage Prevention Cooperative Agreement (DPCA) Contracts: Wildlife Conflict Specialist Rasley processed two new DPCA contracts for Walla Walla and Columbia counties. All information was sent to Olympia.

Inclement Weather Leave: Due to severe weather conditions, Wildlife Conflict Specialist Rasley used several hours of leave for inclement weather.

Cloverland Elk: Natural Resource Technician Heitstuman continued to monitor the elk in the Cloverland area and hazed the animals when necessary. Wildlife Conflict Specialist Wade was in contact with the producer who is currently having issues with elk in his canola field. The producer was using a snowmobile to check his crops due to the heavy accumulation of snow in the area. Wade also coordinated with Biologist Dice to use two tracked ATVs next week to check some areas of Cloverland that have become inaccessible due to snow accumulation and drifting.

Damage Prevention Cooperative Agreement (DPCA): Wildlife Conflict Specialist Wade entered one new DPCA in to Novatus Contracts system for approval.

Columbia County Cougar Issue: Wildlife Conflict Specialist Wade assisted Wildlife Conflict Specialist Rasley in an attempt to locate a large live trap to use in Columbia County for a cougar that is frequenting several outbuildings next to an active calving operation.

Garfield County Cougar Report: Wildlife Conflict Specialist Wade was contacted by a Garfield County landowner to report finding cougar tracks near a small sheep herd that has experienced cougar depredations in the past.

Deer Stuck in Containment Pond: Wildlife Conflict Specialist Wade was contacted on Presidents Day regarding a deer that had become stuck in a frozen containment pound at a local fertilizer plant. Wade coordinated with the Reporting Party (RP) and Officer Sabo. Sabo and the RP were able to scare the deer out of the containment pond.

Fencing Contract: Wildlife Conflict Specialist Wade continued to work on the fencing contract for a producer in Garfield County. After multiple revisions, Wade and the producer came up with a fence plan that will suit the producer's needs. Wade spent a majority of his week calling suppliers in the surrounding area to inquire if they had the necessary supplies, get multiple price quotes, and determine shipping costs. Wade also made inquiries with a local fabrication shop for quotes on building gate frames. Once Wade has compiled all of the price quotes, he can move forward with the contract and submit it for approval.

Wildlife Area Grazing: Wildlife Conflict Specialist Wade responded to requests from Biologist Dice regarding wildlife area grazing and producer's ability to protect their livestock from predators. Wade discussed the issue with Conflict Supervisor McCanna and then provided Biologist Dice clarification on the Washington Administrative Code (WAC) and all producer's right to protect his or her livestock.

Depredation Call: Private Lands Biologist Gaston received a call from a landowner who said they had a potential depredation in northwest Whitman County. Private Lands Biologist Gaston was able to contact Wildlife Conflict Specialist Westerman and coordinate for Wildlife Officer Snyder to go investigate the scene.

Conserving Natural Areas

Planning: Biologist Baarstad discussed scheduling and coordination of upcoming habitat development projects with Supervisor Earl and Biologist Gaston. Baarstad also discussed Lincoln County fire management and restoration projects with Swanson Lakes Wildlife Area staff members and Bureau of Land Management (BLM) personnel.

Farm Bill: Biologist Baarstad reviewed articles related to the new farm bill sent out to staff members from Farm Bill Coordinator Kuttel and worked with the Lincoln County Farm Service Agency on Conservation Reserve Program (CRP) contract items.

Chief Joseph Wildlife Trespass Livestock: Natural Resource Technician Meisner, Biologist Woodall, and Wildlife Area Manager Dice spent time this week trying to get trespass livestock off the wildlife area near upper Joseph Creek and at the headquarters buildings. Meisner and Woodall moved fence material to upper Joseph Creek and began work on rebuilding some fence to correct the problem. Dice spoke to the owners of the livestock about removing their animals from the wildlife area. At this time, cows are gone, including a sick cow that has been hanging around the buildings for some time.



Sick cow in front of the barn at the Chief Joseph Wildlife Area

Blue Mountains Wildlife Areas Winter Closure: Wildlife Area Manager Dice initiated the PAM process for entry closures on portions of the Chief Joseph Wildlife Area and Asotin Creek Wildlife Area to protect wintering big game from human disturbance. District Biologist Wik reported starving elk on the 4-O Ranch Wildlife Area and had to euthanize two cows that could not stand up when approached. Severe winter conditions for February are beginning to take a toll on wildlife, particularly in the Grande Ronde corridor. Specifically, Grouse Flats, 4-O Ranch, Shumaker, and a large portion of the Asotin Creek wildlife areas including the Weatherly Unit, Smoothing Iron Ridge, and the South Fork of Asotin Creek will be off limits to all human entry until April 1. Asotin County has offered to close Cougar Creek Road to public use in conjunction with WDFW's closure. Posting should take place the first week of March.

Providing Education and Outreach

Palouse Conservation District Annual Meeting: Private Lands Biologist Gaston attended the Palouse Conservation District (PCD) annual meeting in Palouse, Washington. The PCD was looking for input on conservation needs in their area from landowners and local agencies. They hope to put together all the input to form a five-year conservation plan.

Laser Shot Game: Private Lands Biologist Thorne Hadley worked with the Blue Mountain Pheasants Forever youth coordinator and WDFW Hunter Education and Volunteer Coordinator Garcia to obtain the WDFW Hunter Education's laser shot game.

Wolf Advisory Group (WAG) Interviews: Supervisor McCanna and four other staff members interviewed six candidates for the three open slots on the WAG.

Wolf Presentation: Wildlife Biologist Prince gave a presentation about wolf biology and WDFW management to a high school class at the Curlew School. Every year in the agriculture class at the high school, the students learn about wolf biology, management, and conflict over the course of a semester. WDFW usually provides a presentation that covers basic wolf biology and ecology, as well as how the state manages wolves.

Deer Management Information: Wildlife Biologist Prince worked with headquarters Wildlife Program staff members and Public Affairs to draft a newspaper article about how the department manages white-tailed deer in Northeastern Washington. The article included information about how WDFW uses survey and harvest data and public input when setting hunting seasons. In addition, Biologist Prince did a radio interview with a local station about the 2019 hunting season proposal that would limit antlerless harvest within District 1.

Great Outdoors and Bike Expo: Water Access Manager Dziekan worked a shift at the WDFW booth during the Great Outdoors and Bike Expo, held at the Spokane Convention Center on Feb. 23 and 24. Dziekan answered questions about land access and areas in Northeast Washington suitable for different types of recreation.



Learning about animal tracks during the expo show - Photo credit: Staci Lehman, WDFW

Website Redesign Review: Wildlife Area Assistant Manager Daro Palmer reviewed and edited webpage content for Sherman Creek, LeClerc Creek, and Rustlers Gulch wildlife areas in preparation for the launch of the new WDFW public website. Wildlife Area Assistant Manager Mike Finch did the same for Swanson Lakes, Revere, and Reardan Audubon wildlife areas.

Conducting Business Operations and Policy

Statewide Private Lands Priorities Conference Call: Private Lands Biologist Gaston and Biologist Baarstad joined in a statewide conference call for Private Lands personnel to discuss priorities for habitat and grants. Regional meetings will occur to discuss more focused regional programs and projects in the near future.

Voluntary Public Access (VPA) Mitigation Strategy: Private Lands Biologist Gaston worked with Private Lands Access Program Manager Strickland to discuss mitigation strategies for contracts that may be affected by the cutoff of funding from the United State Department of Agriculture grant.

Pheasant Release 2019 Schedule: Private Lands Biologist Thorne Hadley reviewed the new proposed schedule of pheasant release dates and pheasant total release numbers for 2019 distributed by Pheasant Release Manager White.

Statewide Priorities Conference Call: Private Lands Biologist Thorne Hadley took part in the Private Lands statewide priorities conference call hosted by Private Lands Access Program Manager Strickland.

Statewide Private Lands Priorities Conference Call: Private Lands Supervisor Earl participated in a call where regional staff members were able to line out which items they would like to focus on in the upcoming biennium. The Private Lands personnel in Region 1, as well as others from across the state, put several great ideas out there. Future meetings will take place by the regions to fine-tune these ideas.

Policy Review: Private Lands Supervisor Earl finished reviewing the new Information Technology (IT) policies and sent and acknowledgement from to Supervisor McCanna.

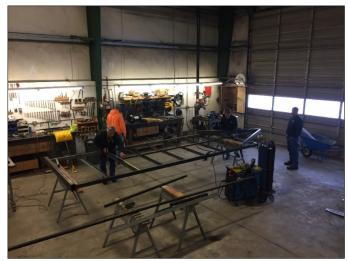
Region 1 Wildlife Conflict Budget: Supervisor McCanna worked with Regional Wildlife Program Manager Robinette and headquarter staff members on the future budget for staffing and goods and services in Region 1.

Blue Mountains Wildlife Area Public Disclosure Requests: Wildlife Area Manager Dice spent quite a bit of time working on Public Disclosure Requests concerning livestock on the wildlife areas.

Blue Mountains Wildlife Area Staff Training: Wildlife Area staff members spent two days in Pullman on Feb. 25 and 26 attending Washington State University (WSU) Pesticide License Recertification training. There were several good talks on subjects common to land management issues on the wildlife areas.

Blue Mountains Wildlife Area Interns: Two student interns from the University of Idaho were selected by Wildlife Area Manager Dice, Biologist Woodall, and Forester Ashiglar to work on the wildlife area this summer. This will be the fifth year the wildlife area has had interns from the University of Idaho. This year's interns are Justin Bright and Emma Charlet.

Asotin Creek Wildlife Area Utility Trailer: Snowy winter weather makes for shop work opportunities. Natural Resource Technician Meisner and Natural Resource Worker McGee started building a new utility trailer for the wildlife area. The existing aluminum trailer is in tatters and not adequately sized. The new trailer will easily haul two modern ATVs. It will also haul them with tracks installed.



Clarkston Wildlife Area staff members fabricating a new utility trailer

Snow Removal: Wildlife area and access personnel dealt with several inches of snowfall, clearing walkways, parking lots, and access roads to wildlife area headquarters.

Budget Review: Complex Manager Juli Anderson reviewed her current budget status with Fiscal Analyst Lisa Nelson. Two budgets are significantly underspent: the Dingell-Johnson account for Lands Access, and the Bonneville Power Administration account for Swanson Lakes Wildlife Area. Anderson worked with Access Manager Daniel Dziekan and Wildlife Area Assistant Manager Mike Finch to develop spending strategies to solve the problems.

Other

Nothing for this reporting period.

REGION 2

HERE'S WHAT WE'VE BEEN UP TO

Managing Wildlife Populations

Chelan Butte Bighorn Sheep Capture: On February 21, WDFW personnel, along with staff members from the Utah Division of Wildlife Resources (UDWR), and volunteers with the Wenatchee Sportsman's Association and Washington Wild Sheep Foundation, captured 28 bighorn sheep on Chelan Butte. Twenty of the sheep were translocated to the Stansbury Mountains in Utah, a rugged mountain range approximately 45 minutes west of Salt Lake City. These mountains are home to a small herd of approximately 60 healthy bighorn sheep that were introduced in 2018. Utah's goals of augmenting this herd are to help attain the population objective more quickly, increase genetic diversity, and expand the current range of the herd. The remaining eight captured sheep, that were not translocated, received GPS collars and were released on site, which will help WDFW better understand habitat use and seasonal movements

of the animals. Animals that were translocated to Utah received physical exams and were tested for a variety of pathogens to ensure that they were healthy before being released. The bighorns were captured using a corral style trap, baited to attract sheep. This trap had been baited continuously since mid-December to condition animals enter the trap. Once sheep are inside the trap, biologists used a trigger to drop an encircling tarp wall around the animals. Construction on this trap began in 2017 and this was the first time this trap was used on Chelan Butte.

Post Capture Activities: Biologist Comstock has received reports from UDWR that all the translocated bighorn sheep cleared their health inspections and were successfully translocated to Utah. From capture to translocation, there were no capture-related mortalities. GPS collar locations from the eight animals collared and released at Chelan Butte indicate that all animals are continuing normal movements and a few even continue to be seen at the trap.



Jace Taylor (UDWR), Devon Comstock (WDFW) and a volunteer prepare to release a bighorn sheep at Chelan Butte - Photo by Justin Haug, WDFW



The not caught - Photo by Justin Haug, WDFW

Black Bear Research: Biologist Fitkin had the privilege of assisting Biologists Beausoleil and Welfelt with a day of bear monitoring work. The crew visited the den of an adult female black bear and her two yearling cubs. The male and female cubs were surprisingly large for their young age and tipped the scales at 107 and 70 pounds. In addition to re-collaring mom, the large cubs were also fitted with radio collars. All appeared to be in great shape. This long-term study is greatly expanding our knowledge of black bear demographics and ecology in Washington, and is helping agency personnel to refine management of this charismatic species.



Biologists Beausoleil and Welfelt using team work to extract an aestheticized cub – Photo by S. Fitkin



A "pile-o-bears" back in their dry, cozy den – Photo by S. Fitkin

Mule Deer Monitoring: Biologists Fitkin and Hansen along with Wildlife Area Manager Troyer conducted the third and final round of flights for radio-collared mule deer in the Methow Valley this winter as part of the effort to develop a sight-ability model for this species in Eastern Washington. Despite some challenges with the weather, they managed to fly over 40 of the study animals this round and have more than 100 data points for the season.



Aerial view of wintering mule deer - Photo by S. Fitkin

Wolverine Monitoring: The batteries and memory cards were replaced in a camera deployed earlier in the winter by Biologist Fitkin and USFS Biologist Rohrer to monitor wolverine activity at an old wolverine trap site. No wolverine detections thus far this winter, but as usual other species never fail to entertain.



Bobcat with kitten leaping for wolverine run-pole camera bait – WDFW remote camera

Providing Recreation Opportunities

Columbia Basin Bird Watching Opportunity: Specialist McPherson has been witnessing a large number of Snow Geese feeding in bluegrass fields off M road. Geese have been primarily roosting on Potholes Reservoir and coming to nearby fields to feed for almost the entire day. Snow geese are becoming a more common sight here in the Columbia Basin. What caught Specialist McPherson's eye though is he has been seeing more of the blue color phase of snow geese which is unusual to see in this area.



Blue color phase snow goose - Photo by C. McPherson

Billy Clapp Lake Boat Launch: Lands Operations Manager Finger and Water Access Manager Harmon met with Bureau of Reclamation (BOR), Recreation Specialist McPherson, and Columbia Basin Hydropower, Assistant Manager/Hydro Supervisor Thomas to discuss the potential for a boat launch development on the north end of the lake near Dry Falls. The south end of Billy Clapp Lake has long been a challenging site for users because of very limited boater parking (around 15 vehicles with trailers) within an established day use area. This forces users to park alongside the county road, which can often be backed up for long distances. The north end of the lake has three potential locations for establishing a launch that occur on BOR lands managed as the Columbia Basin Wildlife Area. The two most feasible sites (1 and 2) have safety concerns due to power generation (up to 8k cfs through hydropower system) and emergency spill (up to 10k cfs over Dry Falls). Yellow lines in the image below are existing buoy lines intended to keep boats out of hazardous areas. These buoy lines are a deterrent rather than a barrier. Site 3 would alleviate the safety concerns but may not be feasible due to topography. The idea of a boat launch at either location one or two is under consideration but for obvious reasons, there is concern. In hopes of better understanding the potential dangers associated with alternatives, the group is tentatively planning to visit Dry Falls during peak flow. This is an opportunity to see a test release over Dry Falls, emergency operations at the hydropower site (which has the potential to spray water beyond the existing buoy line), and witness firsthand the conditions experienced at the various site development alternatives. If the group can identify an appropriate site for development, a Recreation and Conservation Office Boating Facilities Program proposal will be submitted during the 2021-23 cycle.



Non-Highway and Off-road Vehicle Activities (NOVA) Program Presentations: Lands Operations Manager Haug and Methow Assistant Manager Brasier both gave in-person presentations to the Recreation and Conservation Office's scoring board in Tumwater. Haug gave his 20-minute presentation to promote his access improvement project on the Similkameen

River and Brasier presented his Pipestone Trail and access improvement project east of Winthrop. The NOVA non-motorized category is extremely competitive this year, and projects that are accompanied by significant matching contributions and those located close to major population centers will receive additional points that our project lacks. The Pipestone project is a very necessary project that should compete strongly due to its popularity and immediate need for improvements, regardless of match and population density. If funded, a new rode into Pipestone Canyon south, a renovated parking lot with new kiosks, and several desperately needed trail reroutes will result in a first class recreational experience for a diversity of users. Both presentations were received well and will be ranked sometime in June. The two projects would greatly improve usability for each community visitors to the area.



The beginning of the Pipestone Canyon Trails as seen from Lester Road – Photo by Brandon Troyer

March 1 Openers: With the unusual winter conditions (cold and three to four foot drifts) here in the Columbia Basin this year, Water Access personnel have been busy trying to provide access into the March 1 openers. Roads and parking areas are being plowed and paths and access to the restrooms are being shoveled. Most of the lakes are 100 percent covered in ice, but staff members wanted to make sure to provide access so people that would like to try ice fishing have the opportunity.



Winching plow truck out on Road 3 after snapping the front driveline

New Recreation Opportunity on Chelan Butte Unit: Natural Resource Technician Zabreznik discovered a new recreational activity occurring on Chelan Butte Unit: building snow people.



Snowperson on Chelan Butte

Winter Recreation on Columbia Basin Wildlife Area: Ice climbing is becoming a common and growing recreational activity on the Banks Lake Unit of the Columbia Basin Wildlife Area.





Photos by Eric Braaten

Grant County Hunter Access Program: Biologist Hughes met with a landowner whose Hunter Access Program contract had expired in Grant County. The landowner is re-enrolling 5,040 acres into the Feel Free to Hunt program. Hughes filled out and submitted a contract request to Olympia for the landowner. Hughes will be updating all signs for the landowner's property once the snow melts and roads are accessible.

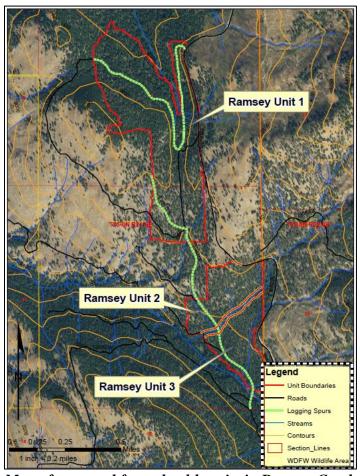
Providing Conflict Prevention and Education

Turkey Conflict in Okanogan County: Specialist Heilhecker visited with a landowner regarding turkeys destroying nests and eggs in a chicken coop. She discussed several nonlethal hazing options but eventually issued several kill permits given their persistence at remaining around the house and outbuildings. Aggression towards people and pets is likely to elevate as turkeys move into the breeding season.

Conserving Natural Landscapes

Ramsey Creek Commercial Thinning Update: The forest health project slated for Ramsey Creek this spring is quickly approaching. As of last week, competitive bids for the commercial thinning and road building aspects of the project took place. Our highly skilled forestry team is actively evaluating those bids. On March 12, sealed bids will be processed to determine which mill will be purchasing the logs. Therefore, work is expected to commence around May as intended.

To summarize, this project entails commercially thinning roughly 247 acres in the Ramsey Creek drainage. The post-harvest results should closely reflect the forest's historic range of variability. To do so, stocking levels will be reduced to approximately 25 to 35 trees per acre depending on site moisture and availability. The thinning prescription is intricate, but revolves around the Individual, Clumps, and Openings techniques which the wildlife area previously implemented in the Bear Creek Unit. After thinning operations, much of the unit will be slated for RX fire in the coming years. 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.



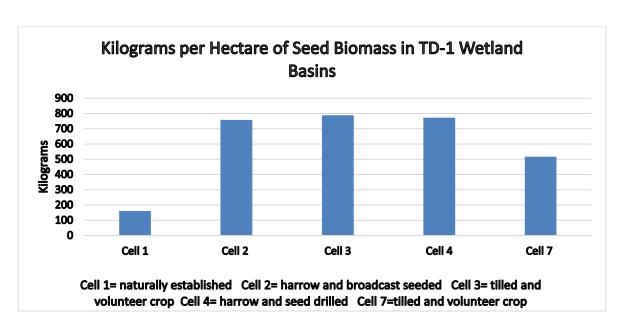
Map of proposed forest health units in Ramsey Creek

Wintering Sharp-tailed Grouse Observations: Conflict Specialist Heilhecker and Assistant Manager Dupont surveyed the Highway 20 corridor for Sharp-tailed Grouse. The riparian vegetation found within the corridor has been identified as suitable habitat for wintering sharp-tailed grouse. A survey earlier this month resulted in two single individuals in this area. This survey resulted in zero observations. However, one sharp-tailed grouse was heard using telemetry equipment. The last telemetry detection of this female was on Oct. 25, 2018 at the Scotch Creek Wildlife Area. Wildlife Area Manager Olson recorded 51 sharp-tailed grouse this week in riparian habitats at or near the Scotch Creek office. This is the largest concentration of wintering sharp-tails observed since the acquisition and enhancement of the Scotch Creek Wildlife Area.



Columbian sharp-tailed grouse in winter habitat at Scotch Creek – Photos by Olson

TD-1 Seed Biomass Survey: Specialist McPherson finished processing/weighing samples and entering/analyzing data. Through our findings, we can support the idea that in wetland cells that receive moist soil management practices out preform basins that naturally establish. Moist soil management techniques like harrowing and tillage plus planting of desirable vegetation allow for early successional and productive wetland habitats that produce valuable forage for waterfowl and other wetland associated wildlife species.



TD-2 Hen Tubes: Specialist McPherson went out and deployed new hen houses and collected the remaining old ones that need new straw and grass hay. Hen tubes are a great way to boost duck production in areas that have low brood numbers or limited breeding habitat. Hen tubes can also significantly benefit succes of nests as predation is greatly reduced by allowing hens to nest in the elevated tubes over water.



Hauling out old hen tubes to be refurbished - Photo by C. McPherson



Refurbished hen tube ready for a hen - Photo by C. McPherson

Columbia Basin Wildlife Area - Troutlodge Water Quality: Lands Operations Manager Finger, Wildlife Area Manager Eidson, and District Habitat Biologist Pentico met with staff members from Troutlodge and the Grant County Conservation District (GCCD) to discuss a habitat development associated with a nutrient retention project intended to address water quality standards in Rocky Ford Creek. Troutlodge is a private fish hatchery operating on WDFW owned lands and is working with the GCCD on a grant proposal to Washington Department of Ecology in the restoration or enhancement category of the Shorelines Terry Husseman Account. The goal of the project is to improve the ability of existing bio retention basins to capture excess nutrients by establishing perennial vegetation. Pentico provided information on regulatory contacts and process. This project was viewed as a benefit to fish and wildlife habitat and Finger provided a letter of approval for the grant application.

Providing Education and Outreach

Sharp-tailed Grouse Presentations at Annual Okanogan Conservation District Banquet:

Wildlife Area Manager Olson teamed up with Wildlife Research Scientist Schroeder and Assistant Wildlife Biologist Heinlen as keynote speakers to present a program on sharp-tailed grouse at the annual banquet of the Okanogan Conservation District. The trio of speakers deemed "The Grouse Guys" presented the national and statewide status of sharp-tailed grouse, translocation successes of 2018, and finally an overview of sharp-tail status in Okanogan County. Olson also presented the habitat enhancements that have occurred on our wildlife areas over the years. The audience appeared to be very engaged and received the presentation well.



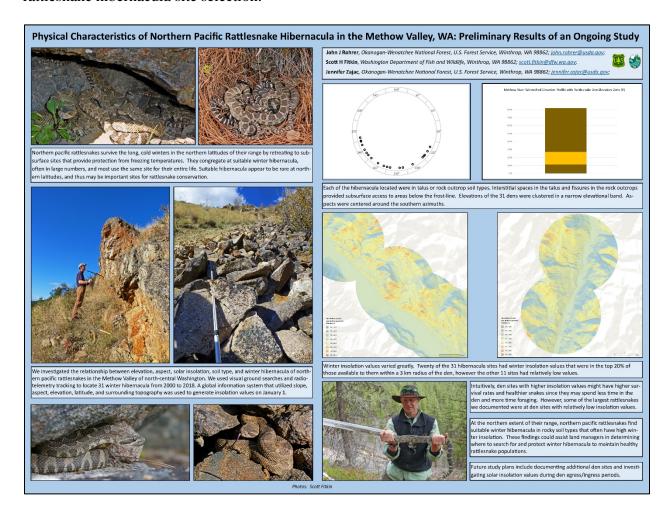
Manager Olson presenting at the Conservation District Banquet - Photo by A. Carlson, Okanogan Conservation District

Wolverine Article: An article on wolverines in the North Cascades by Paula Mackay was recently published in *American Forests* magazine. The article features the North Cascades wolverine study that Biologist Fitkin collaborated on, as well as ongoing and future monitoring efforts in Washington.



Biologists Fitkin and Rohrer in Feb. 2015 with adult male wolverine – Photo by Zachary Winters, USFS

Rattlesnake Research Presentation: Biologist Fitkin collaborated with U.S. Forest Service (USFS) Biologist Rohrer to submit a poster project at the recent Wilderness Society Conference covering preliminary results for ongoing Northern Pacific rattlesnake research in the Methow Valley. The project looks at the effects of slope, aspect, elevation, and solar insolation on rattlesnake hibernacula site selection.



Technical Advice for Habitat on Private Lands: Biologist Hughes provided a landowner with information about food plots for upland birds with a special emphasis on quail. The landowner had reached out to Hughes asking about different seed mixes to put down in a three quarter acre area he had ripped out of a small orchard. Hughes provided the landowner with two different seed mix ideas one for a warm season and one for a cool season mix that would help suppress weeds, grow in a non-irrigated area and provide habitat for upland birds.

Bug Blog:



Dorsal (right photo) and ventral (left photo) view of Microvelia specimen (family: Veliidae)

Photos by A. Bell

In an earlier bug blog, we examined some of the more interesting features of water striders (family gerridae)—a group of insects well-known for their ability to occupy the habitat of the surface of still and slow-moving waters. However, there are a few other, lesser known, families of semi-aquatic insects that inhabit similar areas of freshwater ecosystems. Today's specimen, a short-legged strider (family veliidae), was collected from Ephrata Lake in 2018. Members of this family are globally distributed, with six genera and 34 species occurring in North America.

In many ways, these insects are very similar to their more popularly known relatives. For instance, they are able to skate on the surface of water, using a similar pretarsal morphology (claws positioned prior to apex of the tarsus) that prevents their legs from penetrating the surface of the water. Most species in this family, however, tend to stick to the heavily vegetated nearshore areas of ponds and streams, where they can often be observed in large aggregations. Some species (see *Rhagovelia*) are specially adapted to live in riffle habitats in streams and rivers. They are generally predatory in nature, feeding on zooplankton and small insects including mosquito larvae. Additionally, similar to gerrids, veliids are able to detect potential prey items by sensing vibrations on the surface of the water. Veliids can be distinguished from water striders by their small size (1.5-6 mm) and much shorter legs (as implied by their common name).

Interestingly, many semi-aquatic insect species, including members in the Velidae family, exhibit wing dimorphism, with macropterous (winged) and apterous (wingless) forms. Our specimen (genus: *Microvelia*) appears to exhibit the apterous form, which is common for most adult veliids. This wing dimorphism appears to be mediated by several environmental factors, including local food availability and density of conspecifics (members of the same species).

Mule Deer Foundations Second Mule Deer Summit: Lands Operations Manager Haug attended the Mule Deer Summit in Omak sponsored by the Okanogan Trails Chapter of the Mule Deer Foundation. The summit updated attendees to some of the mule deer related work currently done by the chapter as well as local research that looks at interactions between vehicles, predators and mule deer. Mule Deer Foundation members provided an update on the Safe Passage 97 project which would provide highway underpasses for wildlife passage. Researchers from the University of Washington updated the crowd on two projects: the Mule Deer Mortality Study and the Predator Interaction Study. Both studies are very early in their data collection but early findings spurred some good questions nonetheless. Additionally, representatives from the Washington Department of Transportation presented some data that indicated mule deer movement patterns along Highway 20 in the Methow. Data will help provide guidance to future work to help wildlife move across that portion of road.

REGION 3

HERE'S WHAT WE'VE BEEN UP TO

Managing Wildlife Populations

L.T. Murray Elk Feeding: Elk numbers at both the Watt Canyon and Robinson Canyon feed sites on the L.T. Murray Wildlife Area have remained stable. Natural Resource Technicians Nass and Daling have been feeding hay to approximately 650 and 500 elk at Watt and Robinson Canyons. Nass and Daling have been able to keep the compound, Watt parking lot, and the Robinson access road free of snow with the plow and tractor. However, heavy snowfall and a broken break line on the plow truck made access to the Robinson feed site impossible. L.T. Murray staff members contracted a bulldozer to plow the green dot road up to the feed site to gain access to a larger feeding area.



Five branch-antlered bull elk joining the herd for breakfast at Watt Canyon on the L.T.

Murray Wildlife Area

Winter feeding continues in the Wenas Valley at the Mellotte feed site with elk numbers continuing to increase as numerous winter storms dumped snow on the area. Temperatures are predicted to stay below normal, at least through the first 10 days of March. Total snowfall at the feed site is over 60 inches, with 24 to 30 inches on the ground.

Elk on the feed site are in relatively good condition, with one mortality during this reporting period, increasing total feed site mortalities for this season to two.

Wenas Wildlife Area staff members assisted with elk counts at the Mellotte feed site and with aerial surveys.

Mellotte feed site elk count (2/19/19):

Total	Cows	Calves	Spike	Branched
880	655	188	15	22



Mellotte feed site

Chelan Bighorn Sheep Trapping: District 8 Wildlife Biologist Bernatowicz traveled to Chelan Butte to participate in trapping sheep for local collaring (8) and translocation to Utah (20). The sheep were cooperative and the project went smoothly. This was the first time the trap was used at Chelan Butte, so it was a new learning experience for many in Region 2.

Yakima Herd Elk Surveys: District 8 Wildlife Biologist Bernatowicz helped survey a few feed sites and helped during two days of aerial surveys. The aerial survey data are being used to generate formal estimates of abundance and age and sex ratios using a visibility model. Final herd numbers should be available soon.

Deer Study: District 8 Wildlife Biologist Bernatowicz snowshoed/hiked into two radio-collared deer mortalities. One was an obvious cougar kill and the second deer was a bit of a mystery. The collar had moved from the original kill location onto a very steep rocky slope. The snow in the area was unbroken. It is likely that the collar was slow to report mortality in a timely manner. The collar was under snow and near the top of a small cliff. After slipping and sliding on the slope, Bernatowicz decided to wait for the snow to melt before retrieving the collar.



Limited remains of a collared deer



Final resting spot for a collared deer

District 8 Wildlife Conflict Specialist Wetzel and Enforcement Officer Nasset received several calls about a deer in the Ellensburg city limits with a rattrap caught on its tongue and lower jaw. The deer was immobilized and the trap was removed. The deer's tongue and jaw appeared fine and the deer was released uneventfully.



Deer with serrated rattrap removed from tongue and jaw

Colockum Manager Lopushinsky and Assistant Manager Hagan assisted Region 2 personnel in trapping about 28 bighorn sheep at Chelan Butte. After luring the sheep into the "corral" style trap with bait for several weeks, on trapping day the rolled-up tarp was dropped, confining the sheep inside the trap. Sheep were then individually blindfolded, hobbled, and moved to processing tables for collection of fecal, blood, and nasal swab samples. Staff members from the Utah Department of Natural Resources were on hand, as twenty of the sheep were destined for transport to Utah and eventual release into the Stansbury Mountains. The remaining eight sheep were collared and released back onto Chelan Butte.



Bighorn sheep trap located at Chelan Butte



A blindfolded and hobbled bighorn sheep being removed from the trap



Bighorn sheep being processed

Wenas Wildlife Area Assistant Manager Taylor was able to capture an injured red-tailed hawk after a county grader operator reported seeing it near the side of the road. Staff members transported the hawk as far as Yakima, and then passed it along to a volunteer for delivery to a wildlife rehabilitation facility in Pendleton, Oregon.



Injured hawk

Conditions for Avian Disease Outbreak Exist but No Issues Found in Tri-Cities Yet:

District 4 Wildlife Biologist Fidorra received a report of 50 dead ducks from Oregon just south of Benton County. Fidorra inspected several waterfowl concentration areas where thousands of ducks were congregating, but found no unusual mortality. With cold temperatures and high snow cover, the few remaining open water sites are packed with birds, and conditions for diseases like Avian Cholera to spread quickly exist. This was the case in the winter of 2016-2017 when the Tri-Cities last experience prolonged cold and snow and around 4000 dead birds were collected during an Avian Cholera outbreak where thousands more were likely impacted in the area. Fidorra and Sunnyside Wildlife Area personnel will continue to monitor waterfowl sites through the winter.



Waterfowl foraging and congregating near remaining open water sites near Tri-Cities

Sandhill Cranes in Eastern Washington: Winter sure seems to be hanging on late this year but the birds are back right on time! District 4 Wildlife Biologist Fidorra received a report of spring's first flock of Sandhill cranes sighted near Tri-Cities on Feb. 26. Migratory cranes pass through the Columbia Basin on their way north starting now through April. The best place to see and learn about this spectacle is the Sandhill Crane Festival in Othello, which runs from March 22-24, 2019: https://www.othellosandhillcranefestival.org/.

Providing Recreation Opportunities

With near-record breaking snowfall throughout the Columbia Basin in the month of February, Sunnyside and Snake River Wildlife Area personnel have been working to keep roads and parking lots open for the die-hard outdoor enthusiasts who brave the weather to get outside and enjoy the wildlife area. Eight separate snowy days have provided over 20 inches of snow throughout the past three weeks.



A path cleared from the Sunnyside office toward Giffen Lake



The abundance of snow at the Sunnyside office



Maintaining drivable roads has become a constant chore

Winter conditions have closed many of the Public Access sites in Kittitas County, with the heavy and continuous snowfall making them inaccessible to vehicles.

Region 3 Access personnel servicing the Buena Pond site found outhouses and WDFW signs had been painted heavily with graffiti.



Graffiti on outhouses at Buena Pond (Pond 6)

Region 3 Private Lands Biologist Hulett is working with Fisheries Biologist Nezbet of National Oceanic and Atmospheric Administration (NOAA) on presenting WDFW's GO HUNT and Hunting Access page at an upcoming gathering of the Backcountry Hunters and Anglers in March. This will be the first time the Backcountry Hunters and Anglers have put together a meeting in the Tri-Cities.

Region 3 Private Lands Biologist Hulett attended a conference call with district biologists, regional program managers, and fellow private land biologists to discuss the current Private Lands Priority Areas and how they are currently performing. Additionally, brainstorming has begun to pinpoint new priority areas, projects, and funding needs. This list will be narrowed down at a meeting in March.

Providing Conflict Prevention and Education

Region 3 Conflict Technician Leuck and Conflict Specialist Wetzel continued to monitor for elk in the Thorp area several days this week. A few elk have been seen in the area, but deep snow has restricted access, even with the use of a tracked quad.

Several cattle ranchers in the Ellensburg area called to complain about bald eagles and ravens injuring newborn calves. They were referred to the U.S. Fish and Wildlife Service (United States Fish and Wildlife Service) for advice and information.

Region 3 Natural Resources Technician Leuck and Conflict Specialist Wetzel, assisted by Assistant District Wildlife Biologist Moore in a helicopter, herded elk in west Ellensburg this week. Elk gates and return gates were used to move elk to the correct side of the elk fence. Over 200 elk were moved through fences to the Robinson Canyon side of the elk fence.



A large group of elk herded through elk gate and toward the Robinson feed site

A landowner in the Tampico area called to report elk continuing to access his haystack and feeding area. Heavy tarps were delivered to his location to protect hay stores.

Due to an elk gate left open, either accidentally or intentionally, over 200 elk had entered the Wenas Valley agricultural zone. In a stroke of pure luck, all but four elk were herded back through the fence in four separate herds during an elk survey of the Wenas Wildlife Area. Many thanks to Wenas Wildlife Area Assistant Manager Taylor, Assistant District 8 Wildlife Biologist Moore, and the landowners in the area who granted access to open elk gates. Without this assistance, the chance of getting elk to the correct side of the fence would have been very poor.



Elk out on private ground near Kelley Hollow gate

Paterson Vineyard Deer Damage: District 4 Wildlife Conflict Specialist Hand conducted deer hazing patrols at multiple blocks of large wine grape vineyards in the Paterson area along the Columbia River. Reduced browsing damage by deer has occurred because vines are still in winter dormancy due to the well below normal temperatures and increased snow conditions. Although significant deer activity is occurring, nonlethal hazing and limited damage permit removals have proven to be beneficial.



Deer trail at Paterson Vineyard

Master Hunter Coordination and Deployment to Reduce Deer Damage to Winter Wheat: District 4 Wildlife Conflict Specialist Hand continued to work with Kahlotus area landowners to address deer damage to winter wheat crops. Both nonlethal hazing and damage permit hunting are being implemented to disperse deer activity in the crop. Extreme cold temperatures and heavy snow are making hazing operations difficult. Hand contacted and deployed 14 master hunters from the Region 3 deer list to address deer damage issues in the area. All hunters were provided the new master hunter expectations letter to review, sign and return prior to participating in a damage hunt.

Conserving Natural Landscapes

Stemilt Partnership Update (Edited DNR news release): The Washington State Department of Natural Resources (DNR) recently awarded nine organizations across Washington with a combined \$1.8 million in new grant funding to help make forests in their communities healthier and more resilient to wildfires. Through the All Lands Forest Restoration Grant Program, DNR awarded about \$1.6 million to help these groups plan and conduct forest health treatments such as thinning of overly dense forests. Additionally, under the Building Forest Partnerships Grant Program, DNR awarded \$207,000 to help the organizations with public outreach and partnership development. The grant recipients were all forest collaborates, and included the Stemilt Partnership, which received \$107,198 in All Lands Forest Restoration funding and \$6,920 in Building Forest Partnerships funding. The Stemilt Partnership is a mix of conservation groups, state and county agencies (including WDFW), irrigation districts, and private landowners. As a member of the Stemilt Partnership WDFW actively works with the partnership and is currently planning a forest health and fuels reduction project that will take place in the summer of 2019.

Providing Education and Outreach

- L.T. Murray Manager Babik and partners at Mountains to Sound Greenway submitted an Aquatic Lands Enhancement Account (ALEA) grant to enhance the remaining nine kiosks on the L.T. Murray Wildlife Area. The grant will cover an interpretive panel, kiosk-building material, and map at each site.
- L.T. Murray Manager Babik and Region 3 Habitat Biologist Torrey collected animal parts and created a lesson for Expanding Your Horizons. Approximately 45, fifth through ninth grade girls will learn about careers of female biologists within WDFW. The girls will receive clues about an animal then explore Central Washington University's science building to collect parts of their animal. The young women will give the class a presentation on the critter they built.

Public Outreach at Winter Bird Festival Good for Science and Public: District 4 Wildlife Biologist Fidorra assisted volunteers and USFWS personnel during the weekend Winter Bird Festival at McNary National Wildlife Refuge to set up and run a banding station for small birds. Families with children were constantly swarming the station for a chance to see some winter songbirds up close, and even get a chance to help release the birds after banding. In addition to the outreach and education value, data collected during banding included two recaptured birds with bands from prior studies. All data collected were submitted to the North American Bird Banding Laboratory to augment bird population research across the continent.

Outreach at Elementary School STEM night: District Wildlife Biologist Fidorra set up a display table for the Rosalind Franklin Elementary School's Science, Technology, Engineering, and Math (STEM) family night. Parents and children had fun trying to identify antlers and skulls of various Washington species. Both kids and parents had some interesting guesses!

Conducting Business Operations and Policy

L.T. Murray Manager Babik worked with the Contract Specialist Rennie to submit a contract cancellation notice for the Quilomene Bay project. Babik informed the burn team, contractor, and other WDFW staff members that since tribal consultation was still not initiated ten months after the pedestrian survey was completed spring restoration at Quilomene Bay is canceled. Manager Babik worked with fiscal to JV costs accrued from a burn permit.

Other

Nothing for this reporting period.

REGION 4

HERE'S WHAT WE'VE BEEN UP TO

Managing Wildlife Populations

White-nose Syndrome (WNS) – Yuma Bat Colony Monitoring: Biologist Anderson provided maintenance on a solar acoustic bat call monitoring unit and prepped it for field use. Anderson then met with Seattle City Light staff members to install the unit at a known WNS positive Yuma myotis colony. The intent of this effort is to provide information on the various bat species using this area during the spring emergence period; rate of calls in various species (i.e. most numerous to least) and peak return of Yuma myotis to the area; with an end goal of using this information to plan spring 2019 trapping of Yuma myotis for WNS assessment, pregnancy status, and overall body condition.



A solar powered acoustic bat call recording unit

Common Loon Management: Biologist Anderson represented WDFW and Region 4 in a U.S. Army Corp of Engineers (USACE) meeting regarding nesting loons and monitoring efforts at Howard Hanson Reservoir. USACE and partners desire to trap an adult male as well as any chicks, hopefully this season, to provide for auxiliary identification banding of the new territorial male and any current chicks. This male usurped the territory from the previous male this last season. There was no mortality event at that time so the previous male is assumed to still be marked in the local population barring any other factors that may result in death. Both the previous male and current female had been banded by WDFW and BioDiversity Institute in 2008 to provide for following their territorial use, turn-over, productivity and general individual identification. Successful loon territories are very often usurped as they are desirable by unpaired males in particular. USACE feels continuing with this ability to uniquely identify and track occurrence and breeding activity in local loons is important given the small state listed Sensitive common loon population in Washington. Turnover rate in local loons is unknown but in other areas of their range, it is regular due to this known intraspecific competition life history aspect of sexually mature individuals (most often males). The smaller population we have in Washington is little understood in overall population dynamics. This information would provide more insight into the overall success and population dynamics of our local population for use in conservation management planning efforts. USACE and partners will keep WDFW informed of their plans and progress in achieving this effort.



2018 territorial male and female common loon at Howard Hanson Reservoir that were banded in 2008 - Photo by R. Lucas, USACE



Two chicks produced in 2018 with new male lacking bands – Photo by R. Lucas, USACE

Providing Recreation Opportunities

Goose Management Area (GMA) 1 Late Snow Goose Hunt: Private Lands Access staff members in Region 4 provided 25 Waterfowl Quality Hunt program sites in Skagit and Snohomish counties for hunters during the late snow goose hunt. WDFW lands in GMA 1 were closed to hunting to encourage snow goose use of public land instead of private agricultural fields.



Snow geese using a state-owned field in Skagit County during the late snow goose season in Goose Management Area 1

Waterfowl Quality Hunt Program Site Cleanup: Private Land's personnel continued the process of removing signs, blinds, and litter from Waterfowl Quality Hunt program sites. It is important to have all materials and litter removed from the hunted fields before the farmers get back to field work in the spring.



Region 4 Private Lands staff giving the sign posts a good post-season cleaning before going into storage for the offseason

Annual Green River Quality Hunt Planning Meeting: Biologist Anderson, Regional Wildlife Program Manager Yarborough, and Regional Manager Windrope attended the annual Green River Special Permit Hunt planning meeting. In this meeting, managers with Muckleshoot Indian Tribe, Tacoma Water, and WDFW discussed proposals for annual harvest and hunt logistics within the high-security Green River Watershed. Updates on survey within the Green River Game Management Unit as well as related wildlife projects of interest are discussed. This harvest planning and proposal development effort assists greatly in overall implementation and needs for both the annual hunts in the watershed, related watershed operation needs, as well as planning for future needs related to managing wildlife in the Green River management unit. WDFW is grateful to both Muckleshoot Indian Tribe and Tacoma Water for this collaborative process. We look forward to hunters once again having a great special permit harvest opportunity within this special game management unit as well as working together with Muckleshoot Indian Tribe and Tacoma Water to provide for the health and sustainability of wildlife in this unit.



A bull harvested in the Green River unit

Providing Conflict Prevention and Education

Nothing for this reporting period.

Conserving Natural Landscapes

Fir Island Farm Monitoring: Projects Coordinator Brokaw and Habitat Planner Jenny Baker visited each of the ten monitoring stations in and around the Fir Island Estuary Restoration Project to download monitoring devices that record water levels and salinity in groundwater wells and surface water ditches on 15-minute intervals. These devices have been on the site since before the project was implemented and data are compared to detect change post-project.



Projects Coordinator Brokaw uploads water level data near the Fir Island Estuary Project as

Mount Baker looks on - Photo by Jenny Baker, WDFW

Providing Education and Outreach



District Biologist Milner and her team taught a beginning shorebird identification class at the Stanwood Camano Snow Goose and Birding Festival with partner Gary Slater from the Center for Natural Lands Management. About 50 people attended the class. We have taught this class for several years at this festival and are always surprised and pleased at the number of people who are interested in shorebirds and learning more about them.

Bellevue Master Naturalist Annual Training Class – Living with Urban Wildlife: Biologist Anderson provided a 2.5 hour class to Bellevue Parks and Recreations 2019 group of volunteer master naturalists. The class covered: state wildlife laws, how to "live with common species," how to provide habitat in urban areas to promote local biodiversity and conservation of native species, how to avoid conflict with wildlife in habitat restoration efforts (e.g. all my plants were eaten by X animal!), diseases of note in area wildlife, area wildlife conservation efforts, and related urban wildlife management topics. This group is trained in a host of natural resource topics. They then go forth and act not only as stewards for Bellevue Parks properties but also provide this type of outreach that assist in the management messaging that WDFW and Bellevue Parks personnel emphasize but have lack of capacity to reach all desired citizens and groups. The class went great and another crop of trained citizen conservationists have tools and references to help folks "live with wildlife and keep them wild".

Conducting Business Operations and Policy

Skagit Wildlife Area personnel have been working with regional, district, and Olympia planning staff members to update and prepare materials for the Skagit Wildlife Area plan update. This includes the development of stakeholder contact lists, recruitment for Wildlife Area Advisory Committee, and review of map products and webpage updates.

Skagit Wildlife Area staff members have been working with on upcoming projects for this construction season such as septic repairs on the Skagit residence, installation of gates at Big Ditch, demolition of the barn at the Samish Unit, and construction of the parking lot at the Samish River Unit.

Biologist Meis and Natural Resources Technician Cosgrove have been monitoring water conditions and habitat use on Skagit Wildlife Area and adjacent properties on Fir Island and Nookachamps Basin. Planting plans for the 2019 growing season are being finalized for implementation.

Other

Nothing for this reporting period.

REGION 5

Managing Wildlife Populations

Treponeme-Associated Hoof Disease (TAHD) Survival Study Elk Necropsy: Biologists Holman and Stephens followed-up on an elk mortality notification and conducted a necropsy of the deceased animal. The elk had been GPS collared in December 2015 as part of a study to learn more about the survival and productivity of elk with and without TAHD, as well as the progression of the disease. When she was initially captured and collared in 2015 this elk did not have TAHD, however, upon recapture in 2017 she did display early stages of the disease on both of her hind feet. She died on the south side of Riffe Lake shortly after a significant snow event.

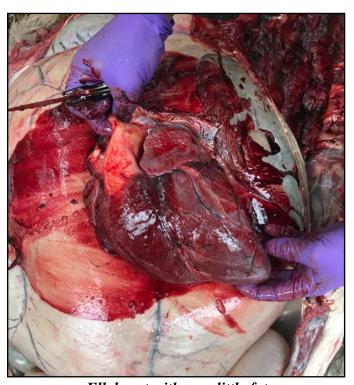
Upon examination in the field, one of her hind feet had progressed to the late stage of TAHD. All four hooves in addition to organ samples were collected and sent to Colorado State University for further examination into cause of death. However, her poor body condition and lack of fat suggest that her death was related to starvation or malnutrition.





Study elk carcass

Elk hoof with late stage TAHD



Elk heart with very little fat

Elk Capture: Wildlife Conflict Specialist Jacobsen, Biologist Wickhem, and Hoof Disease Coordinator Garrison collaborated on an effort to capture and collar elk in western Klickitat County. The purpose of this effort is to better understand the movement patterns of migratory and resident elk herds in the area. After two unsuccessful nights of capture attempts, the team was able to successfully capture and collar an adult cow elk via ground darting.



Working up the cow elk on the steep hillside where it was immobilized



Cow elk with her new collar and ear-tag jewelry

Elk Hoof Disease Survival Study: Biologist Holman conducted a fixed-wing aircraft telemetry survey of elk associated with the Hoof Disease Survival Study. The collars used for this study are now nearing the end of their battery life (after four years) and other methods including aerial telemetry, ground-based telemetry, and citizen reports are now needed to determine the status of study animals. Agency pilot Kimbrel piloted the aircraft and together Kimbrel and Holman navigated and listened for VHF signals from elk who's GPS collar function has failed. Eight elk, out of approximately 23, with problematic collars were located during the effort. One of the eight elk indicated the mortality of the elk. However, the radio signal was too weak to generate any directionality in the signal and a follow-up visit to the carcass and a necropsy will not be possible in this case. The remaining seven detected animals delivered live signals via telemetry. Thanks to pilot Kimbrel for his skillful flying and knowledge of telemetry.

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

Providing Recreation Opportunities

Southwest Washington Goose Management Area 2-Inland: Biologist Burlingame was out checking late season goose hunters in order to collect bag composition data and check for any unlawfully harvested duskies. While teaming up with an enforcement officer, 21 geese were checked with no violations. The late goose-hunting season is open Saturday, Sunday, and Wednesday until March 9, during which WDFW wildlife areas and national wildlife refuges are closed to goose hunting.

Satturlund Access Site: After many years of pursuing funding through the capital projects process to no avail, the Fish Program very generously provided funding to conduct much-needed upgrades to the Satturland Access Site. The road and parking lot were improved and a gate was installed by WDFW engineers. Many thanks to the Fish Program for making these upgrades possible!



Satturlund Access Site

Providing Conflict Prevention and Education

Wolf Observation Report: Wildlife Conflict Specialist Jacobsen followed up on a third-hand report of two wolves running together, and was eventually able to get in touch with the original reporting party. Jacobsen will be meeting with the reporting party in the near future to discuss ways to implement proactive wolf deterrent measures on the reporting party's cattle ranch.

Cougar Concerns: Wildlife Conflict Specialist Jacobsen and Captain Wickersham responded to a residence in Skamania County where a cougar had recently been spotted. Several attractants were present at the site that were likely drawing the cougar in on a regular basis. Jacobsen and Captain Wickersham discussed the importance of removing the attractants on site and provided information on how to respond if a cougar is encountered on the property. A trail camera was deployed to monitor for cougar activity on the property, and a fox light was set up near the residential structures on the property.

Hawks: Wildlife Conflict Specialist Conklin responded to an injured hawk call. Conklin transported the red tailed hawk to the Audubon Society for treatment. Conklin also called a land owner who had caught a hawk inside his chicken coop by placing a bucket over the bird, but needed advice on how to release it safely.

Damage Hunts: Wildlife Conflict Specialist Conklin deployed youth and disabled hunters to Wahkiakum and Lewis counties. Conklin also met with a landowner in Wahkiakum County to discuss damage hunt opportunities for youth and disabled hunters. Conklin received a call from a landowner in Wahkiakum County reporting 50 head of elk grazing on a newly seeded field. Conklin deployed a master hunter to the property. Conklin also responded to several calls in east Lewis County regarding elk damage to crops and fences.



Youth hunter in Wahkiakum County with her first elk

Conserving Natural Landscapes

Mount St. Helens Wildlife Area Mudflow Unit Tree Planting: Wildlife Area Manager Hauswald, Assistant Manager Wildermuth, and Technician Fox spent two days planting 3,000 trees in the Mudflow Unit of the Mount St. Helens Wildlife Area this past week. The trees were planted along the North Fork Toutle River to help enhance the riparian areas and stabilize the riverbank from erosion. Cold temperatures and a couple of inches of snow were present each day of planting on the Mudflow Unit. However, at the upper elevations around the wildlife area the snow was significantly deeper. When leaving each day, snow chains had to be installed on the truck to make it back to the highway as there were approximately 16 inches of snow on the road out of the area. With the winter weather and heavy snow in the region, many elk are utilizing the Mudflow Unit. The public is reminded that the Mudflow Unit is closed until May 1, to reduce disturbance and energy demands of the elk wintering in the area.



Installing chains on work truck

Planting trees on the Mudflow



Bull elk in the planting area

Merrill Lake Unit Visit: Wildlife Area Manager Hauswald and Assistant Manager Wildermuth snowmobiled into the Merrill Lake Unit to check on habitat conditions and to see if there were any off-road violations onto the wildlife area with the recent snowy weather. There were one and a half to two feet of snow present on the area covering much of the winter elk forage. Only one elk was seen during the visit but many other elk tracks were seen in the snow. Most of the tracks were old suggesting that perhaps the majority of the elk in the area had possibly moved to lower elevations where the snow was not as deep. No off-road violations were observed during the visit.



Snow and ice covered Merrill Lake



Snow covered forage areas

Bonfire Clean-up at Shillapoo: Assistant Manager Hawk and Technician Fox removed debris from an illegal bonfire at the Shillapoo Wildlife Area. The debris was blocking an access point for the Shillapoo South Unit that is a high use area for birders, hikers, and hunters. A magnet was used to sweep for nails. Individuals using the Tin Shed Access Site should carefully inspect an area before parking.



Bonfire Clean-up at Shillapoo

East Cascades Oak Partnership Meeting: Klickitat Wildlife Area Manager Van Leuven attended a meeting that included guest speakers from the Columbia Gorge Commission, Wasco County Planning Department, and the Klickitat County Natural Resources Office. Speakers described the work they do to conserve Oregon oak habitats while working within the framework of authority their offices hold, and discussed successes as well as challenges they encounter. Attendees also looked at several expansive spreadsheets that organize much of the information that has been gathered regarding threats to oak habitats, what factors drive those threats, and what measures might be employed to achieve better conservation of oaks on a landscape scale recognizing that the work will need to advance by working with individual landowners and managers. The spreadsheets reflected a huge contribution by many participants to collect as much pertinent information as possible. Although attendees viewed these and provided comments, most felt that these impressive documents needed to be absorbed by studying them before offering further responses.

Oregon Oak Research Project Planning: Klickitat Wildlife Area Manager Van Leuven met with four other members of the East Cascades Oak Partnership (ECOP) group to discuss possible lines of research around re-sprouting by oaks after major stems are cut off. Usually the goal of cutting oaks is to remove the trees, but re-spouting by the cut stumps often foils the effort. ECOP would like to explore ways to treat stumps in a way that prevents or minimizes re-sprouting, while avoiding unintended injury to other desirable plant life. The group developed a sharper focus for the project and identified variables to pay attention to when monitoring treated and untreated plots. The project will receive help from Portland State University and it was suggested that students do a review of existing literature on this aspect of oak horticulture.

Fuel Break Maintenance on the Soda Springs Unit of the Klickitat Wildlife Area: Klickitat Wildlife Area Manager Van Leuven and Assistant Manager Steveson provided an orientation for the Washington Conservation Corps (WCC) crew as they began the Fuel Break Maintenance project on the Soda Springs Unit of the Klickitat Wildlife Area. Van Leuven provided a brief history of the project and explained the purpose of the work and Assistant Manager Steveson

described the details of the work to be done. Steveson worked alongside the crew for two days conducting quality control as well as giving the crew guidance on how to follow the prescription for the project. Assistant Manager Steveson was also able to make an amendment to the existing contract of work for the shaded fuel break maintenance project allowing him to hire a second WCC crew through the Department of Ecology to work on the project. Progress towards completing the project will be slow as the Klickitat Wildlife Area still has over 12 inches of snow. This work involves pruning the lower limbs of trees within the fuel break corridor along the road and cutting shrubs that have grown since the fuel breaks were developed in 2012. The cut material is placed where it can be disposed of later using a masticating machine. Snow hindered progress and although the crews worked diligently, they were only able to complete two thirds of the work by the end of the week. It was necessary to put chains on all tires of 4WD vehicles to access the area and personnel moved about on snowshoes. Steveson is looking into the possibility of bringing a WCC crew back to the wildlife area after the snow has melted to finish the project.



Fuel break maintenance on the Soda Springs Unit of the Klickitat Wildlife Area

Providing Education and Outreach

Washington Chapter of The Wildlife Society Meeting: Biologist Bergh attended the Washington Chapter of The Wildlife Society annual conference and presented a talk titled "Mountain goat surveys at Mount St. Helens." The talk focused on the history of mountain goats around Mount St. Helens as well as the ground and aerial surveys recently conducted as a joint effort between WDFW, the Cowlitz Indian Tribe, the U.S. Forest Service, and the Mount St. Helens Institute. The meeting also included a Northwest PARC (Partners in Amphibian and Reptile Conservation) session on western pond turtles. Unfortunately, many presenters were not able to make it to the conference because of snow and poor road conditions.

REGION 6

HERE'S WHAT WE'VE BEEN UP TO

Managing Wildlife Populations

Elk/Deer Hooves to Washington Animal Disease Diagnostic Lab (WADDL): Wildlife Conflict Specialist Harris was contacted last week by a Panthera researcher that has been working with the Elwha Tribe on a cougar project. He reported that a cow elk had been killed by one of the collared cougars on the Merrill and Ring Tree Farm near Joyce. The hind left hoof of the elk was deformed and fresh tissue was exposed. All other hooves appeared to be normal. The elk was estimated to be around 10 years old and was in poor condition. Biologist Ament collected the hoof and consulted with Veterinarian Mansfield and TAHD Biologist Garrison. To date, the furthest north detection of TAHD on the Olympic Peninsula is a recent positive confirmation from an elk harvested in Forks. The elk hoof has been shipped off to WADDL for TAHD testing. Biologist Ament included four black-tailed deer hooves in the cooler. They were from a Sequim road killed deer that had three deformed hooves. Chronic laminitis is suspected but the decision was made to send the hooves that had been stored in a freezer since June.







Left hind hoove from cow elk killed by cougar near Joyce





Hooves from black-tailed deer that were also sent off to WADDL for testing

Preparing for Wolves in District 11: Biologists Tirhi and State Wolf Specialist Maletzke organized a district wolf 101 preparation day attended by District Biologists Tirhi and Butler, Conflict Specialists Blankenship and Smith, Regional Program Manager Calkins, and Enforcement Sergeants Balazs and Zuchlewski. Specialist Maletzke provided and outstanding overview presentation on wolf biology, habitat use, population dynamics, state status, and district process for surveys and response to livestock depredation. The process is based on eastern Washington examples, honed over the years. Tirhi then showcased the districts 'depredation response kit' that includes all materials for responding to a livestock depredation. The second day was spent assessing locations in the Carbon River and White/Greenwater River areas around Mount Rainier as wolf habitat and looking for tracks. One set of possible tracks was located on a forest road in the Carbon River areas. Both hybrid and possible wolves have been sighted and photographed in this area. Because the tracks are the same for the two, it could potentially be either one. The crew placed a trail camera at an intersection of the tracks and will be back in two weeks to retrieve the camera and continue with more tracking via snowmobiles.

Trumpeter Swan Monitoring: Local Olympic Peninsula Audubon Society (OPAS) volunteers initiated trumpeter swan monitoring in the Dungeness Valley the first week of November. Two teams of surveyors monitor on the same day once a week. One team covers the habitat use areas west of the Dungeness River and another team covers the habitat use areas east of the Dungeness River. Both teams survey during the same time period during the day. This modification from past years will help address the fact that swans have often been observed moving from one site to another during a survey day. The following was reported for the weekly survey conducted on **February 26, 2019: West Side** – Beautiful, clear crisp day. We checked all of the usual places on the west side and observed only 4 trumpeter swans - 3 adult and 1 juvenile. They were located in the field north of Old Olympic Highway next to Long Creek L, across from the Sequim airport. East Side - Beautiful but cold day. Helen and I visited all the recommended sites, including Friendly Lane and 3 Crabs beach. Saw a large flock of Brant geese fly into the bay at 3 Crabs. Only swans were on Schmuck Road both east and west sides of road. In C-4, #8 the two groups were on opposite ends of the field. On the north end there were a total of 15 swans (10 adult, 5 juveniles. On the south end toward the corrals was the large group of 140 swans (105 adults, 35 juveniles). We counted several times as the swans were moving around because cars were stopping for people to take pictures. Also, we had to park near the barn and walk back to the large group. Some started flying toward the smaller group on the west side of the road. In C-4, #9 there were 17 swans (12 adults, 5 juveniles). Total for the day was 172 swans. Total Swans = 176 Monitoring will continue until the second week of April. See photo below.



Trumpeter swans foraging in a farm field in Dungeness Valley

Black Tailed Deer: Biologists Butler and Tirhi responded to a collared buck mortality within District 11 this past week. This particular buck's collar had been providing false mortality signals in the past. Because of this, response was delayed until Deer Specialist Hansen confirmed it as a mortality based on the deer's movement patterns. Butler and Tirhi went to its last known location, but quickly discovered the collar's VFH signal was not functioning. The biologists searched the area for any signs of a mortality event. While no hair, blood, or deer remains were found, the collar was surprisingly discovered. The cause of the deer mortality remains unknown.



BTD collar found alone with no deer remains

Western Pond Turtle: The last of the 2018-2019 treatment turtles finished their treatment at PAWS this month. Ten turtles were trapped in August and transferred to PAWS to undergo treatment for shell disease. The veterinarians used CT scans to identify the location and extent of any shell lesions and then surgically debrided each one. Seven turtles had previously finished treatment and the remaining three finished this February. Biologist Butler and the Sustainability in Prisons Project Turtle Coordinator worked together to transfer these final three to Cedar Creek where they are cared for by inmate technicians as they continue to heal. All ten turtles should be ready for release in April.

In addition, Biologist Butler checked on the western pond turtle nests located at the Pierce County recovery site. Currently, there are eight nests in the ground at this location. After the recent snow event, Butler walked the site to look for any notable changes at the nests and for any signs of hatchling emergence. No signs of hatchling emergence were observed. A few of the nest enclosures looked trampled, which may have been from the snow, and all eight nests were missing their identification tags and flags. A few chewed up tags and flags were found scattered on the nest hill, but luckily, no nests were damaged. Using the GPS nest locations, Butler retagged each nest properly.



Western pond turtle nest hill covered in snow

Swan Mortalities Lake Tapps/Snag Island: Biologist Butler and Tirhi responded to a report of a dead swan on Lake Tapps. This is in response to ongoing swan mortalities from lead poisoning occurring over the past year on Lake Tapps. Encountering engine troubles at the boat launch, Butler and Tirhi looked for the swan from land instead. The dead swan was found caught up on a snag in the middle of an inlet. Thankfully, a helpful resident offered the use of his kayaks to retrieve the bird. The swan was collected and our partners with Puget Sound Energy assisted with transporting the bird north where a necropsy will be done to determine the cause of death.

District 15 Elk Collaring: As part of routine elk monitoring efforts in District 15, Biologist Murphie and Skokomish tribal biologists conducted a two-day radio-collaring effort in GMUs 621, 636, and 651. With funding provided by the Skokomish Tribe, their objective was to add radio-collars to elk groups located in the upper Wynoochee Valley, near Lake Arrowhead, Lilliwaup Swamp, and the Hamma Hamma River valley. They report success in adding four radio-collars to two elk groups in the upper Wynoochee Valley, filling an important gap in their monitoring efforts. They also added one radio-collar to the Lake Arrowhead elk group. Elk groups in the Lilliwaup Swamp and Hamma Hamma were not located. Substantial tracks in the snow indicated they were in dense forest cover.



An adult cow collared near the Wynoochee Dam, recovers from sedatives used to immobilize the elk

Providing Recreation Opportunities

Bobcat Sealing: Biologist Ament met with two hunters on Feb. 21 to seal bobcats that they had harvested. Both bobcats were adult males. One bobcat was younger and had little wear to his teeth. The other bobcat was much older and had a broken canine tooth, along with significant yellow coloration and wear on other teeth. Apparently, each bobcat was harvested when it was encountered while crossing a road being driven by the hunters. Required information was obtained and will be entered into Survey 123.





Michael Poat's third bobcat (old male)

Aaron Abraham's first bobcat (young male)

Goose Hunter Field Checks: Biologist Sundstrom continues to conduct field checks of goose hunters. The late season for the inland portion of Goose Management Area 2 ends on March 9.

Providing Conflict Prevention and Education

McNeil Island Wildlife Conflict Assessment: Conflict Specialist Blankenship and Wildlife Area Manager Lowery conducted a site visit to McNeil Island to assess the wildlife conflict as well as view some of the WDFW facilities and restoration efforts on the island. Blankenship and Lowery met with Department of Social and Health Services (DSHS) and Department of Corrections (DOC) staff members and were given a tour of certain "hot spot" locations for human-wildlife conflicts with a variety of species. Blankenship will be providing information to DSHS and DOC personnel on how to manage and mitigate the various wildlife conflicts that they have experienced on the island.

Orting Valley Elk Conflict: Conflict Specialist Blankenship met with farmers and Pierce County Conservation District staff members in the Orting Valley to discuss elk conflicts they have been dealing with for the last 10 years. Blankenship informed them of the Wildlife Conflict Program and how WDFW can provide tools and resources to help mitigate their conflict problems. Although this first initial meeting was very valuable for both the farmers and WDFW personnel, not all of the farmers in the valley were able to attend this initial site visit. Blankenship requested that a larger meeting be held so that each of the farmers impacted by these elk conflicts could discuss this issue with WDFW and learn how the Wildlife Program can help manage conflicts in their area.

Swan Damage to Crops in Sequim: Wildthing was sent an e-mail on Feb. 17 by Patty McManus Huber, who is co-owner of Nash's Organic Produce in Sequim. She reported that five acres of purple sprouting broccoli and a special cauliflower crop were decimated by trumpeter swans during a two-day period when dense snow blanketed the Sequim-Dungeness Area. See related story at: http://www.sequimgazette.com/news/nashs-organic-produce-loses-10-acres-in-

crops-to-birds/. Patty is actually a friend of Biologist Ament and had left her a phone message the same day regarding the crop damage. Meetings have been held in the past with farm owners and staff members to discuss ways to prevent crop damage from swans. Martha Jordan from the Northwest Swan Conservation Association has also met and provided information to the farm owners. This specialized crop damage was a very unique event that occurred in a very short period of time when the swans had very limited food sources. The situation was discussed with Conflict Specialist Blankenship and Martha Jordan. Conflict Specialist Blankenship who recognizes that this crop loss is a significant financial impact to the operating budget of Nash's Organic Produce provided a detailed e-mail response to Patty. Because WDFW cannot pay claims on damage done by swans to commercial products, he directs the farm owners to the USDA Farm Service Agency: Noninsured Crop Disaster Assistance Program and also encourages them to obtain crop insurance. Biologist Ament and Conflict Specialist Blankenship will continue communications with farm owners and staff members.



Trumpeter swans find limited food during snow event





Valuable broccoli and cauliflower crops after two-day visit from swans

Conserving Natural Landscapes

Three Crabs Celebration: Biologist Ament, along with Habitat Biologists Waldbillig and Zitomer, attended the North Olympic Salmon Coalition (NOSC) ribbon cutting ceremony held back on December 18, 2018 at the WDFW Three Crabs Unit located north of Sequim. The NOSC honored 10 years of hard work and the partnerships made along the way in the Three Crabs nearshore and estuarine restoration. The goal for the project was to restore salmon access to the marsh by removing structures, along with fill and armoring at the site of the former Three Crabs Restaurant. The project has restored ecological function to over 40 acres of coastal wetlands and one-half mile of stream channel. The habitat restoration will also benefit a variety of waterfowl by improving access to valuable habitat. Biologist Ament assisted with preparing the grant applications for this land acquisition in the past. More recently, she worked closely with NOSC and the Olympic Peninsula Audubon Society to protect an established purple martin colony that was using nest boxes on nearshore pilings that were removed. Despite pouring rain during the event, the spirits of those attending did not seem dampened and there was much cheering when the ribbon was cut.



NOSC mascot on the scene



Event attendees explore the Three Crabs beach



WDFW staff members join the special celebration





Views of Three Crabs on Feb. 8

Bush Prairie Habitat Conservation Plan (HCP): Biologist Tirhi represented District 11 at a meeting held by ICF Consultants, who are writing the Bush Prairie Habitat Conservation Plan (HCP) for the City of Tumwater and Port of Olympia. ICF has met individually with WDFW/USFWS biologists over the past few months to gather biological information on the four listed prairie species being covered under the plan (Mazama pocket gopher, streaked horned lark, Oregon spotted frog, Oregon vesper sparrow). This recent meeting was to update the collective group of advisors on the progress of the HCP and to inform that the first three chapters of the plan were ready for advisor review. More information about the HCP is found here: http://www.bushprairiehcp.org/

Providing Education and Outreach

Roadkill Cougar to River Center: Biologist Ament was pleased to assist the Dungeness River Center with providing them a cougar that had been killed by a vehicle on Highway 101 near Discovery Bay. They had a very old cougar mount on display at the center that was in poor condition. Director Powell Jones had mentioned a few years ago that he was hopeful to someday obtain another cougar for a display mount at the center. Biologist Ament had shared this information with Enforcement. The cougar was collected by Sergeant Rosenberger and Officer Hillman and delivered by a tribal officer to the center. Biologist Ament sealed the pelt and took tissue/tooth samples. The cougar was an older male sub-adult that weighed 120 pounds. The animal was in good condition and make for a nice educational display mount at the center.





Powell Jones and Scott Gordon skinning road killed cougar for educational display