

Wildlife Program

Week of March 12-18, 2012

SCIENCE DIVISION

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Topic 1

Washington Ground Squirrel

In 2011 we completed a fourth season of study to test aspects of a survey protocol designed to long-term squirrel occupancy across the landscape. Our goals were to: 1) understand the probability of site occupancy and the environmental covariates that affect occupancy to improve future survey methodologies for monitor squirrel populations; and 2) identify site covariates that affect squirrel occupancy to better manage squirrel patches. We've identified several site covariates (pre-season burrow counts, pre-season no. calls, no. badger burrows, shrub cover, visibility, rock cover) and survey covariates (barometric pressure, windspeed, cloud cover, temperature, survey hour post-dawn) that consistently influenced occupancy and detection probabilities in one or more seasons.

From this information we have identified the detection covariates useful in maximizing detection probabilities for long-term monitoring of occupancy trends (proposed in 2012). We've learned that burrow counts and badger sign may be useful in *pre-survey* (i.e., early spring) assessment of squirrel occupancy. This has potential utility when squirrel occupancy cannot be assessed during the survey period. Visibility of the survey area intuitively is important, as confirmed by our results, but our quantitative measurement of visibility provides a tool for understanding the dynamics of this relationship and how different habitat features including vegetation, rocks, and topography affect our ability to detect squirrels and ultimately occupancy.

However, the covariates that we have found correlated to squirrel occupancy (e.g., badger burrows, micro-site shrub cover) have limited utility for predicting squirrel occupancy across the landscape using GIS mapping because map layers don't exist for these covariates or existing layers do not have enough fine-scale resolution for micro-site selection.

In 2012 we have initiated surveys, in cooperation with District Biologists, to apply the findings of the 2008-11 study to test aspects of a survey protocol designed to monitor long-term squirrel occupancy across the landscape. The protocol will be useful for conducting periodic (e.g., 5-yr) occupancy surveys at established locations throughout the range of the species in Washington in order to assess trend, status, and assess extinction/colonization probabilities over time. The ground squirrel research is funded through Section 6 grants and the state Wildlife Fund.

Topic 2

Buteo/Windpower Study

In 2011 we conducted a second full season of field work to investigate movements, range use, and behavior of territorial adult ferruginous hawks and Swainson's hawks associated with wind power development in south-central Washington and north-central Oregon. Study objectives were to determine micro- and micro-scale range use for both species, and whether or not turbines affected the probability of hawks using different portions of their ranges. We telemetered seven ferruginous hawks and two Swainson's hawks in 2011 (study total 16 and 13, respectively). We conducted 133 hr of observation on telemetered hawks in turbine encounter zones (i.e., < 120 m) to document fine-scale behavioral associations of hawks to turbines. Mean encounter rate for 36 days of observation for combined species was 1 encounter/76 min of observation (SD = 48); thus, hawks regularly flew in close association with turbines on their nesting territories. One monitored Swainson's hawk was killed during the study as a result of turbine collision. Ongoing analysis of landscape-scale range use based on 95,000 GPS locations is being conducted using the Brownian Bridge Movement Model to evaluate range sizes and configurations of birds associated with turbines, and those outside of turbine projects. Once satellite data sets are complete we will analyze resource selection to better understand landscape-scale associations to turbines using fixed-kernel analysis. In 2012 we plan to capture up to four additional ferruginous hawks and conduct additional behavioral observations.

In association with Buteo movement studies, we deployed a prototype GSM PTT on an adult red-tailed hawk last week in northern Puget Sound. The PTT was provided by the manufacturer to test technology of the new PTTs which relies on the cell-phone network. The PTT is functioning well. Jim Watson will be attending a conference next week in Maryland as an invited speaker to discuss the past 20-years of deploying PTTs and the evolution applied PTT technology. We anticipate being able to field test additional donated PTTs following the meeting.

Topic 3

Golden Eagle Related

We've recently submitted two manuscripts dealing with golden eagle ecology:

Andrew A. Duff and James W. Watson. (in review) "A Comparison OF Home Range Mapping Techniques using Golden Eagle (*Aquila chrysaetos*) Global Positioning System Fixes."

W. Grainger Hunt and James W. Watson. (in review). "Can Wind Farms Become Raptor Traps?"

Another manuscript is in preparation with most analysis completed:

"Home-Range and Resource Use by GPS-monitored Adult Golden Eagles with an Emphasis on Understanding Relationships to Wind Turbine Siting," James W. Watson, Andrew A. Duff, and Robert W. Davies.

We continue to monitor telemetered eagles in Oregon and Washington with an emphasis on two areas: juvenile movements and survival, and adult movements and behavior from GSM telemetry (we lost a 3-yr old study eagle we telemetered and a nestling 2 weeks ago to probable gunshot). Through mitigation funds from the Harvest Wind Project in Klickitat County and working with Mike Ritter in the Habitat Division we just obtained a GSM PTT to deploy on an adult golden eagle to test functionality of the technology for obtaining very frequent (e.g., 30 second) fixes that will allow us to plot exact flight paths and potentially locate prey kill locations. We hope to deploy the PTT in the next 2 weeks.

Through the Partners for Wildlife Program coordinated through the Woodland Park Zoo we obtained an \$8,000 grant to assist in our shrubsteppe raptor work (i.e., “Raptor Ecology of the Shrub Steppe”). This is the twelfth year we have received small grants and/or field assistance from zoo staff for conducting raptor work. In the past the project has emphasized cooperative study of ferruginous hawk ecology, but in the past 3 years we’ve used the funds to assess golden eagle prey (purchase and posting of trail cams, and field assistance collecting prey) and with assistance from WPZ raptor staff to conduct focal observations of nesting Buteos associated with wind turbines. We met last month with WPZ staff to discuss future collaboration that will potentially expand the study to include work to assess prey isotopes and lead levels from golden eagle blood samples to better understand correlates of prey and lead contamination.

WILDLIFE DIVERSITY DIVISION

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Habitat Connectivity Project: The Columbia Plateau Habitat Connectivity Analysis is complete and posted online at <http://waconnected.org/columbia-plateau-ecoregion/>. The appendices are still being finalized. This analysis was prepared by the Washington Wildlife Habitat Connectivity Working Group which is comprised of 28 agencies, tribes and organizations. They describe the report as follows: “We present results from two modeling approaches, focal species and landscape integrity. Landscape integrity identifies areas of relatively low human disturbance and connections between these areas. The eleven species (Sharp-tailed Grouse, Greater Sage-Grouse, black-tailed jackrabbit, white-tailed jackrabbit, Townsend’s ground squirrel, Washington ground squirrel, least chipmunk, mule deer, Western rattlesnake, beaver, and tiger salamander) represent six broad vegetation classes within the ecoregion. We synthesize these results in the main report and in more detailed species-specific appendices. Our results support a vision for a connected Columbia Plateau Ecoregion in Washington. This includes descriptions of two broad connectivity regions, the Connected Backbone of central Washington and the Braided Scablands Swath in the far eastern portion of the state, as well as east–west connections between them: the Upper Crab Creek and Lower Crab Creek linkage zones. Complex linkage zones connecting to areas outside of Washington include the Northern, Southern, Cascade Range, and Blue Mountains zones. We encourage that you use this analysis to support the development and implementation of innovative strategies and efforts to help fulfill the vision of a connected Columbia Plateau in Washington.”

WILDLIFE OUTREACH DIVISION

GOAL 2: PROVIDE SUSTAINABLE FISHING, HUNTING AND OTHER WILDLIFE-RELATED RECREATIONAL EXPERIENCES.

Photo Upload Site: Washingtonians have a new way to share their outdoor adventures with others who enjoy hunting, fishing and observing the natural world. WDFW is now accepting photos for a new online gallery of images submitted by people enjoying the great outdoors. As a part of this new service, a contest is being conducted to choose the cover of the 2012 Hunting Pamphlet, featuring a youth with a harvested big game animal. See the following link:

<http://wdfw.wa.gov/sharephotos/>

Predator Depredation Workshops: Predator depredation workshops were held in Spokane, Ellensburg and Ephrata the week of March 13-17, 2012. All presentations were videoed for future use by department staff. Featured presenter was Carter Niemeyer, who discussed nonlethal control techniques, how to determine the cause of death in livestock, and conducted a necropsy on a cougar-killed sheep.



GOAL 3: USE SOUND BUSINESS PRACTICES, DELIVER HIGH-QUALITY CUSTOMER SERVICE.

Wildlife Outreach Volunteers: Volunteer Management Coordinator, James Chandler is currently drafting simplified guidelines for WDFW staff to work with volunteers, which will be available through the intranet, and under the CERVIS (Community Event Registration volunteer Information System) administration login. James Chandler is also investigating the issue around the minimum age for WDFW volunteers.

Citizen Science: Citizen Science coordinator Margaret Tudor collaborated with the Wildlife Science Program staff, to develop a plan for implementing a Citizen Science project on 4 pilot Wildlife Areas to measure Ecological Integrity. Citizen Science volunteers will be trained to provide photo point images at specific locations for WDFW scientists to monitor ecosystem changes of Wildlife Areas.

REGION 1

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Northeast Washington Wolf Management: Assistant District Wildlife Biologist Shepherd and WDFW officer Dan Anderson looked for wolf sign in Deep Creek and near the Summit Lake Road and discussed findings with area rancher Roy Graeber. A discussion concerning extending the size of his calving pasture concluded he needed more area for the health of his herd. A noise making “screamer” pistol with rounds was also delivered to Mr. Graeber so he can haze wolves if necessary. Assistant District Wildlife Biologist Shepherd and WDFW officers Pam Taylor, Dan Anderson, and Don Weatherman deployed commercially fabricated fladry. Assistant District Wildlife Biologist Shepherd also deployed remote cameras near the Graeber Ranch.



WDFW Officers Dan Anderson, Don Weatherman, and Pam Taylor installing fladry at the Graeber Ranch.



Officers Pam Taylor and Don Weatherman and Biologist Shepherd installing commercially fabricated fladry at the Graeber Ranch used to augment the existing homemade fladry.

Depredation Investigation Training: Region 1 Wildlife Program Staff, other WDFW staff, and outside agency personnel participated in this training workshop held in Spokane on Tuesday, March 13th. Implementation strategies for WDFW's wolf management plan were discussed followed by a presentation by Carter Niemeyer. Mr. Niemeyer has over 30 years of experience investigating livestock depredation. Following the lecture portion of the workshop, staff carried out a practice necropsy session in the veterinary laboratory at the regional office using domestic sheep and white-tailed deer.



Wildlife depredation investigation specialist Carter Niemeyer instructs an interagency class.



Carter Niemeyer and WDFW Veterinarian Kristin Mansfield perform a necropsy on a white-tailed deer.

Wildlife Areas



Grouse tracking: Swanson Lakes Wildlife Area's (SLWA's) long-term grouse-tracking volunteer, Dr. Kim Thorburn, is back after a hiatus of a few weeks. She observed sage grouse on their mating grounds, Monday and Tuesday mornings. Tuesday, she brought with her a Reardan High School teacher, Rick Perleberg, and Ike, one of his biology students. The young man plans to attend college in Missoula to become a wildlife biologist. Mr. Perleberg has a small research project going at SLWA, investigating forage preferences of sage grouse in early spring.

Sage grouse, Swanson Lakes WLA 3/14/12 (Photo by Kim Thorburn)

GOAL 2: PROVIDE SUSTAINABLE FISHING, HUNTING AND OTHER WILDLIFE-RELATED RECREATIONAL EXPERIENCES.

Wildlife Areas

WT Wooten Wildlife Area – Lake Inlet Repairs: Debby Flynn, Dave Meisner, and Bob Dice spent the majority of the week repairing wing dams for Lake Inlet structures for Beaver and Watson Lakes. Habitat Engineer Bruce Heiner was on site Tuesday to direct work and walk us through the process. At Bruce’s recommendation due to higher river flows, large boulders were exclusively used at the Beaver inlet instead of materials previously hauled on site last week. Approximately 50 large boulders were collected using an excavator and wildlife area front-end loaders. The rented cat excavator was delivered on site at 11:00 AM Monday morning. The project was completed by 11:00 AM Wednesday morning. Debby Flynn did an excellent job operating the excavator and Dave Meisner spent a lot of uncomfortable time operating our rough riding case loader. The repairs increased flows into the lakes and Dave Meisner was able to turn on outlet screens at both lakes on Thursday.



WDFW Habitat Engineer Bruce Heiner directing Debby Flynn where to place materials at the Deer Lake Inlet.



Debby Flynn placing boulders in the Tucannon River at the Beaver Lake Inlet.

GOAL 3: USE SOUND BUSINESS PRACTICES, DELIVER HIGH-QUALITY CUSTOMER SERVICE.

Private Lands/Access

Strengthening partnerships: Private Lands Biologist Dawn Davis attended the Lower Walla Walla River Restoration Team meeting in Walla Walla. The team is being led by the Walla Walla County Conservation District, which is working with the Confederated Tribes of the Umatilla Indian Reservation and the Tri-State Steelheaders on a reach scale initiative to restore the Lower Walla Walla River. The Lower Walla Walla River is delineated as being the river miles downstream from the confluence of Pine Creek, or the river miles below the Walla Walla major spawning area (MSA) for salmon. The Department of Ecology, Boise Paper, and the Blue Mountain Land Trust were also in attendance. The Lower Walla Walla River is uniformly unstable, has limited riparian habitat, and long stretches of incised banks. The group came together to discuss goals for restoration efforts and identified sites within each of the 4 reaches of the Lower Walla Walla River to target efforts.

REGION 2

Region 2 – Okanogan, Douglas, Chelan, Grant and Adams Counties

Regional Wildlife Program Manager: Matt Monda

DISTRICT BIOLOGISTS

District 5: Grant / Adams District - Rich Finger / Brock Hoenes

Weather Conditions: Typical spring conditions on the Columbia Plateau, wind, rain, sun, and more wind.

Weekender Opportunities: Sandhill Cranes have begun to trickle in and can likely be observed around Columbia National Wildlife Refuge. Around 35,000 lesser Sandhill cranes migrate through the Pacific Flyway. Many of these birds travel through eastern Washington during their spring and fall migrations. These cranes winter in the southern portion of California's Central Valley and pass through on their way to nesting sites in the Matanuska River Valley and Bristol Bay areas of south-central Alaska. The greatest concentration of lesser sandhill cranes arrives in March and can be found frequenting areas such as the Columbia National Wildlife Refuge Marsh Units, Frenchmen Reserve, Potholes Reservoir, Scootney Reservoir, and Winchester Reserve. Long-billed curlews are typically observed during March-June in agricultural fields such as alfalfa and hay or in large expanses of very short vegetation. Farm fields near Othello, Moses Lake, George, and Quincy all have potential to support curlew. Long-billed curlew nest commonly in the short grasses that occur in the Seep Lakes Unit.

The Sandhill Crane festival is coming up; March 23-25.

District 6: Okanogan District - Scott Fitkin / Jeff Heinlen

Weather Conditions: Winter continues to hang on with several inches of snow this week in the Methow; however, south facing melted off fairly quickly and ungulate winter range is mostly snow free.

Weekender Opportunities: Many birds beginning to migrate north and passerines are starting to sing in the morning hours. Loons and migratory waterfowl are showing up on larger water bodies. Eagles are visible everywhere; this is a great time to see bald eagles on nests before leaf out. Deer are easily observed foraging in the evenings throughout the lower elevations of the district. Great horned owls have been observed sitting on nests

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

North Cascades Wolverine Research Project: Rocky made another appearance, this time at one of our Twisp River Traps. This was a fortuitous capture, as Rocky's collar had been giving us very little usable data. Wildlife biologist Scott Fitkin and USFS staff successfully replaced his satellite collar and early returns already suggest an improvement in reliable locations being transmitted.



Old friend Rocky

Bighorn Sheep Management: Assistant District Wildlife Biologist Heinlen coordinated with Washington State University graduate student Tiffany Baker about collecting the first round of radio collars that are scheduled to “drop-off” animals during the first part of March. These radio collars were deployed in 2010 with a two-year drop off function. The data is part of the Sinlahekin Bighorn sheep research project that is examining the effects of timber thinning and prescribed fire treatments on habitat use in the Sinlahekin Wildlife Area.

GOAL 2: PROVIDE SUSTAINABLE FISHING, HUNTING AND OTHER WILDLIFE-RELATED RECREATIONAL EXPERIENCES.



Bobcat & Coyote pelts

Furbearer Management: Assistant District Biologist Heinlen sealed seven bobcats taken in the Okanogan for two trappers as they are ending their season and wanting to sell the pelts.

WILDLIFE AREAS

Methow Wildlife Area Complex - Tom McCoy / Rob Wottlin / John Haegan

Weather Conditions: Sunny, highs in the 40's and 50's with lows in the 20's. Snow early in the week has given way to beautiful early spring weather.

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Forest Management: Methow Manger, Tom McCoy met with The Nature Conservancy's Eastside Forest Stewardship Director on Thursday to discuss the remaining steps to finishing the Methow Forest Management Plan and steps to preparing for implementation. We also covered public outreach and potential research efforts associated with our forest restoration project.

GOAL 3: USE SOUND BUSINESS PRACTICES, DELIVER HIGH-QUALITY CUSTOMER SERVICE.

Shooting Range Improvements: Methow Assistant Manager, Rob Wottlin designed and constructed a prototype shooting bench for our newly upgraded shooting range. We will take prototype down to the range next week and solicit input from users before constructing the remainder.

Given the abundant and highly enthusiastic response we have received so far on this project, these new benches should be greatly appreciated.

Wells Wildlife Area Complex –Dan Peterson / Ann Winters / Fidel Rios

Weather Conditions: Early in the week we had light rain in the lower elevations and heavy wet snow on Dyer Hill and the Waterville Plateau. Temperatures ranged from lows in around 32 to the mid/upper 40's.

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Pygmy Rabbit Recovery, Part 1: Sunday afternoon the volunteer team of sisters Angel and Kimber Hastings traveled to Pendleton, Oregon to pick up two pygmy rabbits that had been trapped in Nevada and transport them to the Sagebrush Flat unit. The Nevada trapping team included Olympia biologists Elizabeth Rodrick and Harriet Allen who drove the Nevada – Pendleton leg of the trip. Biologist Dan Peterson spent Wednesday and Thursday on a round trip excursion to Elko, Nevada to transport another pygmy rabbit to the Sagebrush Flat unit. The trip required about 27 hours of driving over the 1,389 mile distance. A total of 23 rabbits were captured and moved from Nevada.

Pygmy Rabbit Recovery, Part 2: Wednesday, Biologist Ann Winters traveled to Richfield, Utah with fellow biologists Dave Volsen and Chad Eidson to join Research Scientist Penny Becker for the second phase of this spring's trapping effort. They expect to return this Thursday.



Dry Creek Is Not So Dry:

This week, we found that a combination of moisture laden snow, rain and warm temperatures in the local area resulted in a severe runoff event in the Dry Creek drainage located on the east side of Dyer Hill. Our road and culvert on the Bridgeport Unit fell victim as did county road North Division. Division provides the most convenient access to our higher elevation parcels on Dyer Hill.

Scotch Creek Wildlife Area Complex - Jim Olson / Brian DuPont / Mike Nelson

Weather Conditions: Wet and wild. Monday started with 12" of heavy wet snow, followed by alternating days of melting and more snowfall. With the ground still frozen, we now have mud and standing water on most fields and Scotch Creek is running at full bank width. Temps remain cool with highs only in the low 40's. Winter is hanging on.

Sinlahekin Wildlife Area Complex - Dale Swedberg / Justin Haug

Weather Conditions: For the week daytime temperatures ranged from high 40's to low mid 50's. Nighttime temperatures ranged from high teens to low 30's. Received about .3 inch of rain. In one day received about 4 inches of snow which disappeared in about 24 hours causing concern about potential flooding, however cold temperatures abated the flood potential. Small patches of snow lingering on North slopes and shaded areas, but south slopes are bare. Roads are soft and muddy. Many signs posted on muddy roads to keep traffic off them, were torn down.

Weekender Opportunities: Bird watching opportunities include species previously listed in weekly reports - Red-tailed hawks, pileated woodpeckers, ring-necked pheasant, American goldfinches, pine grosbeak, American robin, northern shrike, northern harriers, redpolls, trumpeter swans, Bohemian waxwings, Clark's nutcrackers, black-capped chickadees, northern flicker - red-shafted variety, sharp-shinned hawk, and hooded mergansers, rough-legged hawk and prairie falcon. Newest birds observed dark-eyed juncos, Say's phoebe, numerous waterfowl showing up to lakes that still have a lot of ice on them.

Chelan Wildlife Area Complex - Ron Fox

Weather Conditions: The White River Unit is still stuck in winter's grip.



White River Unit, 3-15-12

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Chelan PUD Entiat Transmission Line: Chelan Manager, Ron Fox, met with Chelan PUD's (CPUD) Von Pope and George Valazquez at the site of one of the 3-pole structures. The CPUD hoped to find an access route for construction vehicles to prepare the site for the pole installation rather than doing it with hand tools. The setting of the poles will still be done with a helicopter. After looking over the site and existing access roads, we found a possible route to the site that will travel less than 100 feet through an already disturbed area. The newly disturbed area would be included with other areas to be restored per the existing agreement for the transmission line. The CPUD will now submit a formal request for this change.



Entiat Transmission Line 3-pole structure location

GOAL 2: PROVIDE SUSTAINABLE FISHING, HUNTING AND OTHER WILDLIFE-RELATED RECREATIONAL EXPERIENCES.

Beebe Springs Natural Area Phase 4A Trails: Chelan Manager, Ron Fox, worked with Michael De La Cruz, Engineering, and consultants from J.A. Brennan on design options for trails and a trail head parking area to be included in this phase. Rough drafts of interpretive sign themes were also worked over.

WenatcheeOutdoors.org: Charlie Hickenbottum, local outdoor adventure seeker, contacted Ron Fox, Chelan Wildlife Manager, about hikes/scrambles on the Entiat Unit that he had recently completed. He wanted to promote the hikes on the Wenatchee Outdoors website. His hike of interest coincidentally was in the same area as the Chelan PUD's new transmission line on Ribbon Mesa. After much discussion about the Ribbon Mesa route and possible trespass issues, Ron and Charlie discussed the potential for disturbance of wintering mule deer on this and other areas of the wildlife area. He agreed that part of his hike description on the Wenatchee Outdoors website would include asking users to refrain from doing the hikes during December-April when mule deer are on the winter range. Charlie also accepted Ron's offer to become a member of the Chelan Wildlife Area CAG.

PRIVATE LANDS - John Cotton / Eric Braaten / JoAnn Wisniewski

Weather Conditions: Temperatures for the week were similar to historical averages with highs in the 50's and lows near freezing.

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

State Acres for Wildlife Enhancement (SAFE): Private Lands Biologist Cotton submitted a spreadsheet showing completed work for our contract with Natural Resources Conservation Services (NRCS) during the last Quarter of 2011. Private Lands Biologist Braaten worked on SAFE data management and reviewed data for SAFE field work completed for a NRCS quarterly report.

Conservation Reserve Program (CRP): Private Lands Biologist Braaten met with Douglas County landowner to discuss CRP signup 43 options and discussing pollinator habitat requirements for two CRP parcels coming out in 2012.

Birders Watching Sensitive Wildlife: Private Lands Biologist Braaten talked with a bird watcher who was asking permission to view Sage grouse on a lek in Douglas County this week. This same bird watcher got permission last year from the private landowner to put up a blind on the lek and take pictures. The Private Lands Biologist discussed issues with the landowner and bird watcher last year, which has opened annual communication between WDFW staff, birder and landowner. Annual lek counts can be skewed by disturbance. Educating birders about viewing or photography from proper distances is needed for some popular leks.

REGION 3

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Sage-grouse: District Wildlife Biologist Mike Livingston assisted Yakima Training Center staff in capturing and attaching radio transmitters to greater sage-grouse. Three females and one male were captured and fitted with transmitters. A total of five females and 11 males are now “on air” and being monitored by YTC staff. WDFW’s William Meyer and Will Moore also assisted with capture.



Female greater sage-grouse with radio transmitter

Winter Conditions: Low temps this week ranged from the 20’s to low 30’s. Highs were in the 40’s to low 50’s. Several inches of new snow accumulated in the feed sites. Forecast is for more of the same next week. Elk condition appears stable.

REGION 4

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Ross Lake Wolf Project: Biologist DeBruyn lead coordination efforts with partnering agencies (National Park Service, BC Ministry of Environment,) to prepare for next week's site visit to Ross Lake. The primary purpose of the trip is to retrieve images from trail cameras intended to monitor winter wolf activity. Additionally, the crew intends to follow up on another potential wolf sighting elsewhere in this area.

Oregon Spotted Frog Survey: Biologist Bohannon and the Forest Service technicians started surveying new areas for Oregon spotted frogs this week. A new site along the Samish River in Skagit County had 7 egg masses in a single cluster that look like Oregon Spotted Frog. This site will be monitored and a trap set to confirm their presence. This would be the first documentation of an Oregon Spotted Frog in Skagit County since the 1930's. The site is about 6 miles from the nearest known site near headwaters of the Samish River.



A new site in Skagit County had 7 egg masses in a single cluster that look like Oregon Spotted Frog. This would be the first documentation of an Oregon Spotted Frog in Skagit County since the 1930's.

The site in Whatcom County where Bohannon captured the Oregon Spotted Frog last week has picked up in activity. Last week there were 9 egg masses, one week later on Wednesday there were 34, and on Friday there were a total of 64 masses. Bohannon visited the site Friday with a volunteer that had not seen Oregon Spotted Frog egg masses and they were able to hear males vocalizing. The other sites from last year have cooler water temperatures and have not started showing any breeding activity.



Biologist Jennifer Bohannon documents Spotted Frog egg clusters in Whatcom Co.

Swan Mortality and Morbidity Study: Biologists Danilson and DeBruyn took in four power line mortalities, and recovering a swan that had apparently been shot near Birdview. The power line mortality recovered Dugualla Bay had been banded as a juvenile in Oregon in 1992. DeBruyn collected tissue samples and updated the swan mortality log.

Washington Bat Working Group Annual Meeting: Biologist Anderson represented Region 4, North Puget Sound, at the annual WA Bat Working Group (WABWG) meeting. Other attendees were with USFWS, BLM, Cascadia Research Group, Bats Northwest, Cascade Grotto, Hanford Dept. of Energy contract biologists; and other private, NGO and government entities.

Discussions involved current bat work in WA, extending the USFS bat grid, work on the Pacific Northwest White-nose Syndrome Management Plan, and various research efforts with WA bats.

WDFW-Woodland Park Zoo Citizen Amphibian Monitoring Project: Biologist Anderson met with Woodland Park Zoo(WPZ)-WDFW amphibian monitoring volunteers and Shadow Lake Bog Preserve representatives to discuss long-term survey at the bog property. Survey will include areas such as the main pond designed by Dr. Klaus Richter, ephemeral ponds on the property, a stormwater unit, the lake itself, and pond that is planned to be restored and enhanced. This provides a before/after control/impact examination of amphibian use on the property in comparison to the current degraded wetland, and how things will change once restoration and enhancement efforts are complete. More information on Shadow Lake Nature Preserve can be found here: <http://shadowhabitat.org/>

More information regarding the WDFW-WPZ Citizen Amphibian Monitoring Project and upcoming efforts and participation opportunity in 2013 can be found here:

<http://www.zoo.org/page.aspx?pid=2004>

Watchable Wildlife – WDFW Heron Cam Learning Project at Discovery Park, Seattle:

Biologist Anderson met with Seattle Parks and Recreation (SPR) staff and camera specialists with Critter Zoom at Discovery Park Learning Center to discuss implementation of a heron cam television exhibit in the learning center. The group has equipment but will need to work on obtaining adequate internet access and then development of interpretive signage for the exhibit. We look forward to working on these needs and having a great exhibit for citizens visiting the center. Visitors will have opportunity to learn about the nearby heron colony, heron biology, urban ecology, urban factors that affect herons and other wildlife, as well as interpretive opportunity with naturalists at the Discovery Park Learning Center. We also hope to switch the television display to other wildlife cameras with WDFW and collaborators. More information on the WDFW Wildlife Cameras at: <http://wdfw.wa.gov/wildwatch/>

Wildlife Areas

Whatcom Wildlife Area: Manager Kessler checked the water controls on the Lake Terrell and Intalco units. He cleared the water control at the Intalco Unit that beavers keep plugging up. Manager Kessler and volunteers worked on the Tennant Lake Unit clearing the beaver deceiver pipes and some dams on Tennant Creek to lower Tennant Lake and dry out the boardwalk.

Tennant Lake Unit: Manager Kessler coordinated with Whatcom County Parks on the Parks plan to evict the bats from the maternity roost at the historic Hovander House. The last estimate had the population at 1200 bats. He contacted Paul DuBruyn who will work with the County and Bats Northwest.

Nooksack Unit: Manager Kessler coordinated with a volunteer monitoring the wood duck boxes on the unit. He has 15 boxes on Silver Creek all cleaned and prepped for this season.



15 wood duck boxes on Silver Creek all cleaned and prepped for this season

GOAL 2: PROVIDE SUSTAINABLE FISHING, HUNTING AND OTHER WILDLIFE-RELATED RECREATIONAL EXPERIENCES.

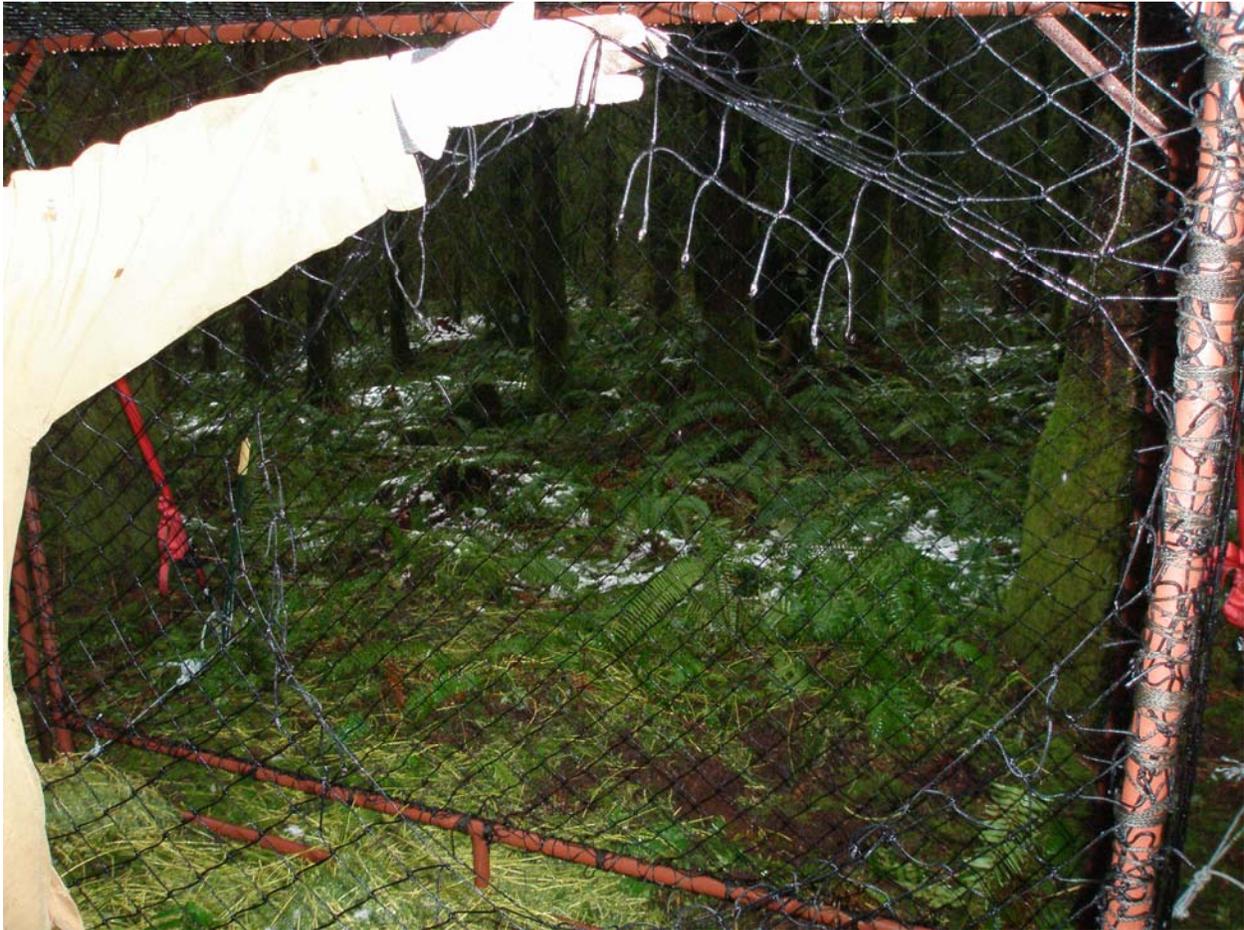
Wildlife Management

WDFW Take Authorization Permits: Biologist Anderson worked with Region 4 Wildlife Manager Russell Link to provide Seattle City Light (SCL) with an annual wildlife take authorization letter to meet state wildlife laws and associated considerations in regards to SCL facility management and safety needs.

Pacific Coast Joint Venture Grants: District Biologist Milner, in partnership with Ecostudies Institute began drafting two applications for the Joint Venture discretionary funds grants. One application seeks funding to host an event celebrating the designation of Skagit and Port Susan

Bays as a site within the Western Hemisphere Shorebird Reserve Network, the other seeks funds for a shorebird citizen science project.

North Cascades Elk Trap and Radio Collar Project: This was a slow week for the elk Clover trapping project. Spring green up has started, which is potentially decreasing the attractiveness of the bait we are using to lure elk into the traps. Some bait sites continue to be visited by elk, often this has been bull elk, which we are not targeting. We did have some excitement early in the week when a bull was briefly captured in one of the traps. However, it was able to escape by shredding the netting on the trap.



Clover trap netting damage from bull trapped during the week of March 12th



Bull elk photographed at one of the District 14 Clover trap bait stations

Wildlife Areas

Intalco Unit: Manager Kessler coordinated with the Custer Sportsmen's Club on the Archery Course on the Intalco Unit. They held another weekend work party cleaning up the area and hanging archery targets. Manager Kessler continued construction of the new reader board for the archery course.

Private Lands/Access

North Skagit Spring Bear Hunt: Biologists Danilson and Roozen continued to work on public access for the North Skagit spring bear hunt. Danilson pushed the District 14 proposal forward within WDFW, while Roozen began drafting notice letters and vehicle passes for permit holders. This effort is intended to address issues identified by the Washington DNR and private landowner partners from past years' spring bear hunts and will also better meet the needs of hunters drawn for this hunt.

GOAL 3: USE SOUND BUSINESS PRACTICES, DELIVER HIGH-QUALITY CUSTOMER SERVICE.

Wildlife Management

Volunteer Registration: District Biologist Milner worked with Outreach and Education staff to get an amphibian monitoring volunteer project posted to the web so that volunteers can register and use the system.

Wings Over Water Bird Festival: Biologist DeBruyn manned an observation station at the annual Wings over Water bird festival in Blaine to assist citizens with observation and identification of sea ducks and shorebirds.

Wildlife Areas

Snoqualmie Wildlife Area Parking Lot Improvements: Manager Paulson and Access Manager Hacker worked on improving the Stillwater and Crescent Lake Units parking lots. The pot holes that covered the parking lots were scraped then filled with rock. Old fencing and poles were removed while other trash and debris was collected and hauled off site.

Skagit Headquarters/Wiley Slough: Manager Schuster participated in a Wiley Slough Adaptive Management team meeting. The primary topic of discussion was the latest tide gate repair proposals prepared by Northwest Hydraulic Consultants (NHC). Commissioners from DD#22 were present to provide input on NHC proposals and other proposed designs provided by Leo Kuntz from Nehalem Marine. The decision was made to forward proposals to NHC for engineering review and cost estimates. The group will reconvene in April to discuss the proposals in more detail. Funding options have not been fully discussed by the group. WDFW agrees to work through all funding options with Skagit River Systems Cooperative and the District #22.

Natural Resource Specialist Meis began photographing all Wildlife Area sign boards to begin project to update signs and information provided. The plan is to develop more standardized sign layout with site specific maps and information.

Island Unit: Manager Schuster and Natural Resource Specialist Meis continue to evaluate other farming methods and costs on this site due to the logistical constraints that have resulted from the loss of the WDFW barge last farming season. The use of private barge services is costly and an acquisition plan for a new or used barge has not been fully developed. Natural Resource Specialist Meis began researching contracts regarding aerial seed/ fertilizer application for potential use on the Island and looked at current fuel and fertilizer costs. Additional equipment acquisition are being examined such as new and used barge pricing and an additional fuel tank and trailer.

GOAL 4: MAINTAIN A HIGHLY SKILLED AND MOTIVATED WORKFORCE.

Regional Office Mill Creek: Manager Schuster attended the Ethics Training Refresher Course at the Mill Creek Office.

REGION 5

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Wildlife Management

Black Tailed Deer Project: Biologists Miller and Bergh received a call from a landowner who had a dead radio-collared deer on his property. Unfortunately, this was one of the deer collared in last week's efforts. The landowner reported coyote activity on his property the night before and bite wounds on the doe's head indicated coyote predation. Thanks to the quick reporting by the landowner the deer was intact enough to determine cause of death.



Black tailed deer mortality

Western Pond Turtle: Biologist Anderson, Wildlife Area Manager Van Leuven, and volunteer Enz completed shrub planting on the Sondino Unit of the Klickitat Wildlife Area. These planting were part of a habitat improvement project for the western pond turtle. Non native blackberry was removed in 2011 and 180 of a variety of native shrubs were planted to provide cover for nesting and overwintering western pond turtles, as well as make it more difficult for blackberries to re-invade the area. This project was the last of BPA funded habitat improvement work funding for the contract period in 2011/2012.



Native shrub planting for Western Pond Turtle on the Sondino Unit.

Cackling Canada Goose Survey: Biologists Bergh and Miller conducted the Cackling Canada goose Mark-Resight survey in Cowlitz and Wahkiakum counties. Approximately 3,000 cacklers were seen—two with neck collars. This same survey will be conducted next week and the resight information will be used in estimating abundance.

GOAL 2: PROVIDE SUSTAINABLE FISHING, HUNTING AND OTHER WILDLIFE-RELATED RECREATIONAL EXPERIENCES.

Wildlife Management

2012 Big Game Hunting Seasons and Regulations: Biologist Holman reviewed the draft version of the 2012 Big Game Hunting Seasons and Regulations. Numerous typos and suggested edits were located and forwarded on to Program Manager Jonker. Hunters interested in the 2012 pamphlet should see both hard copies and web-site versions in mid April. The special permit application deadline will be May 18, 2012.

Mt. St. Helens Elk Study: Biologists Holman and George compiled information from the elk organ collection effort associated with the 2011 hunting season. Elk hunters who voluntarily submitted organs for body condition scoring were entered into a randomized drawing for prizes donated by cooperating organizations and businesses. Thank you letters were generated and sent to the prize donators who included: The Rocky Mountain Elk Foundation, Weyerhaeuser Corporation, The Yacolt Burn Sportsman's Club, Wholesale Sports, Bob's Sporting Goods, Cabela's, and Work Sharp. Thank you letters were also generated and sent to all hunters who submitted samples. Finally, the randomly drawn winners of each of the prizes were contacted by telephone and their prizes were mailed. Collectively, the cooperative effort with the University of Alberta resulted in the collection of 153 samples of hunter harvested elk hearts, pericardiums, kidneys for body condition (fat) scoring, teeth for ageing, reproductive information, etc. Thanks again to both the donators and hunters who made the donations.

Winter Conditions:

D-10 & MSHWA Winter Conditions:

Past Weather: November temperatures were below normal and precipitation was slightly above average. Snow accumulated in mid and low elevations early in the month but was later melted off by a major warm rainstorm. Most of the month of December was unusually dry with below normal temperatures except the last week, which was warm and wet. The first half of January was mild with relatively warm and dry conditions but was followed by a mid-month storm with significant low elevation snow and valley accumulations. The latter part of the month was relatively normal with occasional rain and snow elevations generally above 2500 feet. The month of February fluctuated between almost spring like conditions and cold and wet periods, including some low elevation snowfall at the end of the month. Early March was a typical

period fluctuating between warm dry and cold wet weather. This turned to a series of mid month storms with probably the most severe conditions we have seen in the foothills all winter.

Short-Term Forecast: Cold and wet over the next week with light but consistent snow in the mid and low elevations. Valley temperatures will range from the low 30's to low 40's. The 6-10 and 8-14 day outlooks both clearly predict below normal temperatures and above normal precipitation. In other words we could be in for another two weeks of conditions like we have seen recently.

Long-Term Forecast: Long range forecasts still suggest below normal temperatures through April and perhaps May. However, it appears that we can expect relatively normal amounts of precipitation.

Habitat: Low elevation snow has accumulated over the past week and may continue to increase. At the current time it is difficult to predict the effect this might have on forage availability in the lowest most critical winter range sites.

Snow Depths: Some snow present at low elevations, which may concentrate animals or limit forage availability in some areas. Snowpack is now above average in the Southwest Cascades. See spreadsheet below for detailed information ([19March2012-MSH_Sno-Depth.pdf](#)).

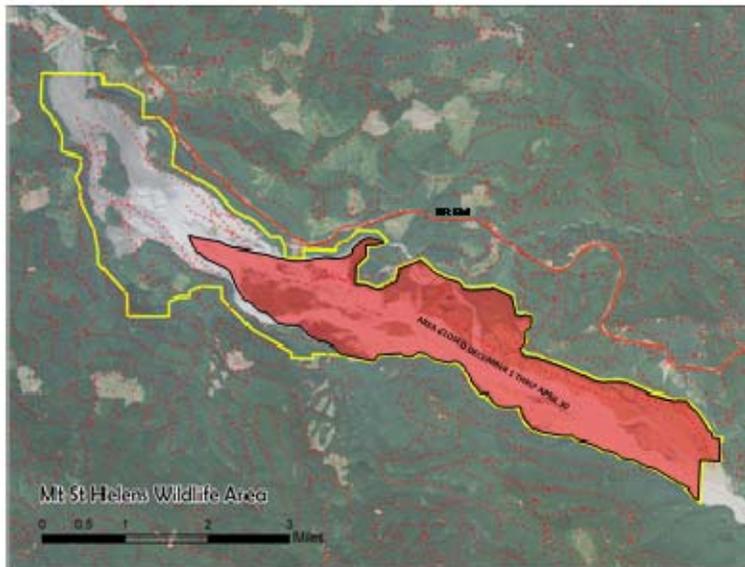
Animal Concentrations: No unusual concentrations noted to date. 152 elk were observed on the mudflow monitoring area on March 7, 2012. Previous counts include 120 elk on February 1, 2012; 176 elk January 3, 2012; and 116 elk on December 5, 2011.

Animal Condition: To date only a very few animals have been seen that appeared to be in relatively poor body condition and these have typically been associated with apparent hoof rot. None observed in severe decline that could be linked to winter conditions. The recent and near term expected conditions are of the nature that sometimes cause animals to decline rapidly, particularly late in the winter.

Mortality: No new observations reported.

Public Contacts: None to report related to winter conditions.

The public is reminded that the Mudflow Unit of the Mt. St. Helens Wildlife Area lying East of a line defined by Hoffstadt Creek, The North Fork Toutle and Deer Creek is closed to public access through April 30 to minimize disturbance and associated energy demands on elk wintering there.



**Mt. St. Helens
Wildlife Area
Elk Winter
Range Closure
Area**

**The highlighted
area is closed
to public
access
December 1 to
April 30 each
year to limit
human
disturbance of
elk wintering in
the valley.**

District 9: Winter Conditions

Weather This Week: There was significant new snow in the south Cascades this week. Snow levels came down to 500 feet and up to 20 inches of new snow was reported above 2000 ft. Warmer weather came later in the week and most of the new snow melted below 1500 ft.

Winter Severity: There still is little concern for the overall severity of the winter conditions on big game populations in Skamania County and the western portion of Klickitat County. Most significant deer and elk wintering habitats are open and eastern Klickitat County and most habitat below 3000 ft is snow free as the overall winter has been mild.

Habitat: At the Klickitat Wildlife Area the majority of habitat is snow free and south facing slopes are starting to green up.

Animal Concentrations: No unusual concentrations reported.

Animal Condition: Deer and elk appear to still be in good condition.

Mortality: None documented this week.

Public Contacts: No weather related concerns raised by the public this week.

REGION 6

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Wildlife Management

Tundra Swans – Hicks Lake: Biologist Tirhi is working with Martha Jordan of the Trumpeter Swan Society (TTSS) to manage a pair of juvenile trumpeter swans that were released on Hicks Lake, Thurston County in 2011. Initially, a pair of mute swans were residing on the lake and under WDFW policy, had to be removed prior to breeding. Many landowners were upset with the decision. At the same time, a pair of rehabilitated trumpeter swans were in need of release. Officer Klein worked with Martha Jordan to educate the public and conduct the removal of mutes and replacement with trumpeters. This pilot project had been considered successful until recently when complaints from lakefront owners and boaters began to come into the agency. This was an experimental release designed by WDFW and TTSS to evaluate the option of replacing deleterious exotic mute swans with native trumpeter swans. Trumpeter swans, like mute swans, can become aggressive and present safety threats, as evidenced by encounters on the south end of Hicks Lake. Continued feeding and resulting acclimation to human interactions have not helped the situation. These factors, combined with the swans' use of popular public recreation areas at Nisqually NWR, have led WDFW and TTSS to pursue removal and relocation of these birds to captive breeding facilities.

Trumpeter Swan (native)



Mute Swan (non-native)



Deer Study:

Pysht Cluster: Biologist Loafman reports three does and three fawns are still alive as of March 15:

Mason Cluster: Bio Murphie continued monitoring efforts of collared deer associated with Dr. C. Rice's deer project. He reports an additional mortality occurred this week. A thorough investigation of cause was thwarted by accumulated snowfall and will occur after the snow

melts. Collaring efforts to deploy radio-transmitters on additional deer continues. The photo below is from a successful capture by net-gunning in the Mason GMU.



Research Scientist C. Rice and Bio S. Harris at doe capture in Mason GMU. Photo courtesy of B. Murphie