

Wildlife Program

Week of March 10-16, 2014

SCIENCE DIVISION

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Wildlife Management

Western Gray Squirrel: Matt Vander Haegen (Wildlife Science) participated in a workshop to assess the status of western gray squirrel conservation in Washington, focusing on data gaps for Diversity Division 2-year action plans and the current Standard Operating Procedure (SOP) for screening and reviewing forest practice applications. Participants from Wildlife and Habitat Programs both from Olympia and the Regions discussed current methods and needed actions. Cross-program coordination to achieve advancement of conservation and review processes was discussed.

Shrub Steppe Conservation Initiative: Matt Vander Haegen (Wildlife Science) participated in a meeting to identify goals and provide direction for Wildlife Program's Shrub Steppe Conservation Initiative. This was the first organizational meeting following the initial workshop held at The Wildlife Society (TWS) meeting in Pasco. Participants were primarily from Diversity and Science Divisions. Among the outcomes of this second meeting were: 1) the need for a steering committee that will help shape the project and that will include representation from the Regions and, potentially, outside experts, 2) the need for a thorough literature review to identify potentially useful approaches already employed, 3) recognition that a community approach (rather than species by species) might best achieve the types of goals being considered.

Western Pond Turtle Workshop: Matt Vander Haegen (Wildlife Science) participated in the annual western pond turtle workshop and presented information on population estimates and plans for field sampling in spring 2014. Participants in the meeting included Washington Department of Fish and Wildlife (WDFW) Diversity, Science, and regional staff along with several veterinarians and representatives from zoos and other Non-Governmental Organizations (NGOs) involved with recovery efforts. A key discussion topic was the detection, treatment and potential effects of ulcerative shell disease, a recognized threat to recovery of western pond turtles in Washington.

WILDLIFE DIVERSITY DIVISION

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Wildlife Management

Butterfly Conservation: Fish and Wildlife Biologist Ann Potter worked jointly with local biologist and photographer Rod Gilbert to develop a butterfly identification pamphlet for the

south Puget Sound region. The pamphlet will provide a guide to local butterflies for a region with an abundance of human interest and butterfly species of conservation concern. The project was initiated by Gilbert. Ann developed the text materials, including flight periods, host plants, and identifying wing and flight patterns for each species. Gilbert and Potter plan to have the pamphlet ready for use in spring 2014.

Western Pond Turtle Recovery Coordination: Section Manager Becker and Biologist Lisa Hallock organized the Annual Western Pond Turtle Recovery Meeting. The meeting was well attended with more than 25 people representing our many active participating partner agencies, organizations and volunteers. The morning session included a Health Team meeting of veterinarians and biologists to discuss actions to further research and treat ulcerative shell disease. The afternoon session focused on coordinating actions for the field season such as population monitoring, sampling for disease research, habitat enhancement, and head starting of juveniles at the zoos.

Washington Connected Landscapes Project: The Washington Wildlife Habitat Connectivity Working Group (WHCWG) submitted two proposals to the Great Northern Landscape Conservation Cooperative. The first is co-led by The British Columbia Connectivity Collaborative and the WHCWG. This proposal requests funding to develop operational scale connectivity analyses within identified priority linkage areas in the British Columbia-Washington transboundary subregion (from the Cascades crest eastward through the Kettle River Range within the Columbia Mountains).

The second WHCWG proposal requests funding to complete a habitat model for Greater Sage-Grouse in the Columbia Plateau Ecoregion, test connectivity model predictions for Greater Sage-Grouse and focal species tied to sage-steppe ecotypes (black- and white-tailed jackrabbits), integrate model testing results in an adaptive management framework to inform conservation action within the area of the Great Northern Landscape Conservation Cooperative (GNLCC), and communicate to share connectivity information (Natural Resource Scientist Schuett-Hames).

Reporting State Wildlife Grant Accomplishments – Section Manager Bruce Thompson and Biologist Chris Sato completed and submitted the Final Performance Report to US Fish and Wildlife Service (USFWS) for State Wildlife Grant funding used during 2012-2013 to implement the Washington Comprehensive Wildlife Conservation Strategy. This project, totaling \$664,615, implements status assessment work, habitat management and restoration, and technical assistance through staff in Olympia and 33 districts statewide for more than 50 Species of Greatest Conservation Need (SGCN).

In addition, Section Manager Penny Becker completed two reports on State Wildlife Grant Funding. The projects covered endangered, threatened, sensitive and candidate species recovery actions and surveys. The grant funds were spent specifically on fisher, Western pond turtle, sage grouse, sharptail grouse, burrowing owl, Washington ground squirrel, wolves, pygmy rabbits, Northern leopard frog, Oregon spotted frog, golden eagle, lynx, Mardon skipper, Taylors Checkerspot, Island marble, western gray squirrel, and sea otter.

REGION 1

GOAL 3: PROMOTE A HEALTHY ECONOMY, PROTECT COMMUNITY CHARACTER, MAINTAIN AN OVERALL HIGH QUALITY OF LIFE, AND DELIVER HIGH-QUALITY CUSTOMER SERVICE

Wildlife Areas

Kettle Falls Elementary School Forest Health

Education: The 4th graders from Kettle Falls came out to the Sherman Creek Wildlife Area (SCWA) on Wednesday this week for expeditionary learning about forest health. We were able to take advantage of the expertise of Mike Johnson, Forest Health Specialist for the Department of Natural Resources (DNR) here in their Northeast Region. The day started in the shop where Mike talked about insects and diseases that affect forest stands, otherwise known as “Bugs and Crud” and under what conditions are forest stands at elevated risk for problems. Once outside, the students were challenged to identify signs of bark beetle and root rot that they had learned about earlier in the morning. We visited thinned and un-thinned stands associated with the habitat improvement project on SCWA and discussed forest management for the benefit of wildlife. Students also learned how to core a tree and determine the basal area per acre of live trees in a stand.



Top Right: All students determined the basal area factor of their thumbs so they could be used as a cruise angle. Gunner is using his thumb to determine the basal area per acre of live trees in this plot. Above: Department of Natural Resources (DNR) Forest Health Specialist Mike Johnson shows the students how to core a tree.

REGION 2

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Wildlife Management

Washington ground squirrel – Finger participated in an internal conference call to discuss a future Great Northern LCC funding proposal for Washington ground squirrel genetics work to validate models generated by the Washington Wildlife Habitat Connectivity Working Group (WWHCWG). The conclusion of the meeting was that further development into the methods was necessary before a competitive proposal could be submitted, and we will target next year's funding cycle or other opportunities as they become available. Finger followed up with conversations with Andrew Shirk (WWHCWG; University of Washington) and Stephen Spear (University of Idaho) to better develop methods for an individual based approach to resistance model validation involving genetic and landscape distance matrices. Finger generated a draft sampling distribution based off of historic survey data and juxtaposition of features contributing strong resistance in least-cost paths modeling. This sampling distribution was shared with Andrew and Stephen for their input.

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

Wildlife Areas

Bike Trails and Local Business: The Methow Wildlife Area staff met with a local business owner and members of the Evergreen Mountain Bike Alliance to discuss multi-use/multi-season recreational trails, signage, gates, public education ideas, and volunteer maintenance possibilities that would help improve the recreational experience of those using the Methow Wildlife Area and focus recreational use to designated areas to help reduce impacts to wildlife and wildlife habitat.



This week, Rob Wottlin spent time in his newly renovated shop fabricating a snow grooming sled designed to be pulled behind a snow machine. This sled will greatly improve our ability to create and maintain winter recreational trails on the Methow Wildlife Area.

GOAL 3: PROMOTE A HEALTHY ECONOMY, PROTECT COMMUNITY CHARACTER, MAINTAIN AN OVERALL HIGH QUALITY OF LIFE, AND DELIVER HIGH-QUALITY CUSTOMER SERVICE

Wildlife Management

US Forest Service (USFS) Spring Burning: Biologist Volsen visited a proposed USFS spring burning area to assess mule deer use. As per agreements between the agencies, the USFS asks for comments from the District prior to burning. On these parcels south of Lake Chelan the recent snows were starting to recede, however, use was still evident on the site. On most of the area, green up had not yet started, which indicates that deer use may actually increase over time as vegetation responds to increasing soil temperatures and begins growing. This has been an atypical winter, with snows coming late in the winter, and deer distribution changing in almost a reverse manner; high in the early winter and lower elevation later when snows finally arrived. Biologist Volsen's recommendation will be to delay any burning related activity until after April 1, 2014.



Proposed U.S. Forest Service (USFS) spring burn unit south of Lake Chelan.

Wildlife Areas

Sinlahekin Forest Restoration Project: Project Forester Jamie Bass finalized the boundaries for the current mechanical treatment areas planned in the Sinlahekin based on operability for logging equipment and value of thinned trees to maximize the restoration value of a timber sale planned for later this year. In addition, Bass began marking units according to the Sinlahekin Restoration Prescription, which allow for creating the “clump-gap” structure found in healthy historic forest structure. The groupings of trees allow for crown connectivity in small groups, will varying the crown and stem spatial relation between clumps to limit fire, bug and mistletoe

mortality. The value of this spatial heterogeneity, though widely supported in restoration forest science literature, will then be monitored over the next couple decades as disturbances continue to change the structure of the Wildlife Area's forested habitat. Maps and estimated volume for the timber sale were also put together this week by the project forester for the Forest Practices Assessment to ensure our treatments meets all the rules and regulations for environmental protection in Washington State.

Methow Forest Restoration Project: Using ArcGIS and the finely tuned stand assessment completed by Stewardship Forestry LLC in the Methow Valley Wildlife Area, Project Forester Jamie Bass began outlining areas of possible mechanical treatment depending on fire risk, old tree protection, logging feasibility, and need for restoration thinning. These areas will be of the most focus over the next year as Bass works with Asst. Manager John Lindsey to get the dangerously overstocked lands treated and ready for prescription fire as needed. Soon they plan to meet with the prescription fire managers to more finitely define treatment units based on what makes sense for burn units (i.e., slope breaks, fire lines, and manageable acreage). Other areas with valuable big, old pine trees in need of canopy release or overtopped Aspen groves will be hand-thinned by the Okanogan fire crew when their burn season is not in effect. This is the beginning of a project that will likely span at least three years, and put the Methow on the way to being a more-healthy, fire-safe habitat for our state's wildlife.

Private Lands/Access

Environmental Quality Incentives Program (EQIP): Biologist Dougherty has continued reaching out to landowners that might want to plant idle agricultural areas (irrigation circle corners) to wildlife habitat. This allows idle farm ground with no wildlife benefit to be converted from a weedy mess to an oasis of viable wildlife resources.



Left: *Typical Circle Corner in Irrigated fields (note the sea of mustards).* **Right:** *Wildlife Friendly circle corner (Note vigorous grasses and a diversity of shrubs).* Photos by Sean Dougherty

Additionally, Biologist Dougherty assisted Technician Steele with checking the status of many of the existing habitat plots to determine if the plots are ready to have regular weed maintenance ended. At this time there are 14 plots that still require maintenance to control weeds. There are 20 plots that are low priority requiring little maintenance and may be removed from general maintenance after this growing season, and there are 5 new plots that will be planted this fall

following a summer fallow period. All told there are around 100 habitat plots scattered throughout the Irrigation District providing habitat for wildlife.

GOAL 4: BUILD AN EFFECTIVE AND EFFICIENT ORGANIZATION BY SUPPORTING OUR WORKFORCE, IMPROVING BUSINESS PROCESSES, AND INVESTING IN TECHNOLOGY

Observed Environment (weather, fire, etc.): Spring is trying to spring here in the Methow Valley, what a difference two weeks make!



February 24



March 14



Juvenile Cougar – Sinlahekin Wildlife Area. Photo by Justin Haug

REGION 3

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Wildlife Management

Burrowing Owls: A pair of owls has taken up residence at the webcam site and the breeding season has begun! Biologist Gregory met with Greg Falxa from the Diversity Division to discuss the existing webcam equipment and opportunities for improvement. The objective is to improve the camera resolution and streaming capabilities and enhance opportunities for education and research. Biologist Gregory also spoke with a nature writer interested in writing a series of essays and eventually a book about burrowing owls in Washington.



A male and female burrowing owl pair at the WDFW web camera site.

Muckleshoot Indian Tribe (MIT) Mule Deer Research: Biologist Moore responded to a request from MIT to retrieve a GPS collar and collect samples from deer mortality on private property in the Manastash area. Moore acquired permission to access the property and samples were collected. This was an obvious cougar kill.

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Private Lands/Access

Wanapum Dam: The Wanapum Dam situation is still unfolding. The reservoir is down approximately 26 feet as Grant Public Utility District (PUD) works on the dam after a large crack was found in concrete on the downstream side. We have been coordinating with Grant PUD in getting the word out



View of the Wanapum Reservoir drawdown near Colockum Wildlife Area boat launch.

that the shoreline is closed to public access due to public safety and cultural resource issues. We commissioned two different sign orders to close the WDFW YoYo Rock boat launch and access points along the Colockum Wildlife Area shoreline. We were getting a large number of people parking on Tarpiscan Road and walking down to the river from the boat launch to the mouth of Tarpiscan Creek. Grant PUD staff, Chelan County Sherriff's Office, WDFW Enforcement and a private security company are all working to keep folks away from the shoreline.

Wildlife Areas

LT Murray Wildlife Area:

Staff members Wayne and Craig posted emergency closure signs on wildlife area roads that access the Columbia River. While posting Quilomene Bay, Wayne encountered a couple scavengers walking the sandbar and beach area with a metal detector, but PUD staff escorted them off. The closure will help Grant County PUD manage public safety, and protect cultural resources that were exposed by the Wanapum pool draw-down.



WDFW staff assisted Muckleshoot tribal biologists with recapturing a cow elk in Watt to replace an aging collar.



Left: Whiskey Dick Bay. Right: Quilomene Creek cut a channel through the exposed silt of Quilomene Bay.

Wenas Wildlife Area: Manager Cindi Confer Morris was contacted by a neighbor Saturday evening regarding a fire on the south side of Umtanum Ridge, west of the McCade area. She responded to the area and found approximately half an acre of open timber/bitterbrush burning. Central Washington Interagency Communication Center (CWICC) had already been notified, but she was able to provide better information on location, access and threat of spread. Since DNR

hasn't yet staffed up for fire season, they requested that Selah Fire provide a brush truck to contain the fire. The fire was within the wildlife area boundary, but on DNR land, and within the forest protection boundary, so costs should be covered by DNR fire program.



REGION 4

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Wildlife Management

Cackling Canada Goose Mark-resight Survey: Biologists Anderson and Smith participated in a survey of cackling Canada geese. The surveys occur in all areas these geese inhabit fall to spring from California to British Columbia with the goal of observing marked and un-marked individuals during



Cackling Canada Goose

established survey periods. Although marked individuals were documented in King County during the annual midwinter waterfowl surveys, no marked individuals were documented during this week's surveys. These surveys provide data used to estimate abundance of cackling Canada geese, and also assess survival rates and movement patterns.



Flock of Canada geese in a horse pasture in King County during the spring cackling Canada goose survey.



A trail camera captured recent elk activity in agricultural fields in the Snoqualmie Valley.

Snoqualmie Valley Elk Damage:

Biologist Smith used a trail camera to monitor intermittent nocturnal elk/deer activity on agricultural properties. Damage has occurred to various crops in the area including vegetables, flowers and Christmas trees. Smith worked with the Master Hunter coordinator to get a master hunter assigned and the third cow elk was harvested from the area. Smith also spent time in the area with a local high school student job shadow measuring areas for potential temporary elk exclusion fencing. The student job shadow was very enthusiastic, professional and helpful.

Elk Clover Trapping: Biologist DeBruyn continued working with a cooperative of members from the Point Elliot Tribes to establish and operate large live traps to collar elk. Work this week included establishing and monitoring bait sites and relocating traps. The effort is part of ongoing work to monitor population levels of the North Cascades (Nooksack) elk herd.

Aquatic Lands Enhancement Account (ALEA) grant review and scoring: Biologist Milner continued reviewing and scoring the 50 grant applications submitted for Aquatic Lands Enhancement Act funding.

WDFW – Woodland Park Zoo Annual Citizen Science Amphibian Monitoring Training TWS WA Chapter Presentation: Staff from Woodland Park Zoo shared the joint presentation to the WA Chapter of The Wildlife Society regarding this project. The meeting was held earlier last month. This joint presentation mentions our new Wildlife Observation website in use with citizen efforts. Next steps with this group will be to continue collecting more data, implementing time and better ability for QA/QC of data (to this point there has only been opportunity for limited volunteer summary and no staff time allocated for complete data quality review), and examination of this trend data in comparison with various landscape factors. View the Wildlife Observations webpage at <http://wdfw.wa.gov/viewing/observations/>.



Students participated in joint Amphibian Monitoring Training.

Swan Mortality and Morbidity Study: Natural Resource Technician Anderson documented five new swan mortalities in Skagit and Whatcom counties this week. Four were trumpeter swans and one was a tundra swan. Surveys for swans in roosting and feeding areas were conducted this week in addition to responding to reports of sick, dead and injured swans on the

swan and nutria hotline. This decline in mortalities coincides with the seasonal migration of swans for the upcoming breeding season. A noticed change in distribution and habitat use by swans is also noted in Skagit and Whatcom counties. Anderson worked with Biologist Danilson to develop a schedule for the final wind down of the remaining few weeks of Anderson’s term on this project, which will include data entry, transport of tissue samples to Canada, and return of the field vehicle.

Table: Swan mortalities in Region 4 and Sumas.

	Skagit	Snohomish	Whatcom	Sumas	TOTAL
Powerline suspect	19	6	16		41
Lead suspect	20	8	see unk	9	37
Aspergillosis suspect			See unk	1	1
Trauma suspect	1	2	1	1 (shot)	5
Unknown	24	1	167	1	193
Feather Pile	9	4	27		40
TOTAL	73	21	211	12	317

Wildlife Management Consultation/Permitting Requests – Municipal, Private Utilities, other: Biologist Anderson fielded requests (e.g., Puget Sound Energy) for heron management plan support and assistance under local code needs per Growth Management Act; state wildlife take authorization requests and ongoing consultations; bald eagle nest reports/status updates and explaining changes to management of this species.

Anderson spent three hours canvassing a neighborhood and monitoring for eagle activity in a 1000 ft. area centering on reports in a specific area of suburban Bellevue. Anderson witnessed adult flight activity to the NE, near a known nest area; but no activity, trees that would be more likely to support eagle activity, or discussions with locals supporting observations of regular activity in the area of concern (Bridle Trails). Anderson provided contacts and asked community members to keep in contact, and utilize the WDFW Wildlife Observation site at <http://wdfw.wa.gov/viewing/observations/> or the WDFW Bald Eagle Management page at http://wdfw.wa.gov/conservation/bald_eagle/.

Biologist Danilson assisted Northwest Straits Foundation Staff in obtaining information on bald eagle nest sites on Fidalgo Island to support environmental review of a project that will remove riprap from the shoreline between Washington Park and the Western Washington University’s Shannon Point Marine Center.

Biologist Danilson assisted the project scientist for the Whatcom County Amphibian Monitoring Project (WCAMP) in developing a scientific collection permit (SCP) application. WCAMP volunteers will be monitoring amphibians throughout Whatcom County during the spring months. Additionally, the WCAMP scientist and experienced volunteers will conduct continued monitoring of Oregon Spotted Frogs on a private property in Whatcom County including the work outlined in the SCP.

Wildlife Harassment – Heron Colony at

Ballard Locks: Biologist Anderson discussed observed use of a rotary model hover craft that spent time in the air over the Commodore Park heron colony in Seattle. This is a very urban colony and located immediately adjacent to the Ballard Locks. Much tourism occurs here, as well as management of the locks by the Army Corp of Engineers. The reporting parties, both previous volunteers with WDFW, outlined the aircraft approached the colony a number of times, flushing all birds from the colony at least five times. Information was passed along to Wildlife Enforcement and the Army Corp will be contacted for their knowledge.

Wildlife Areas

Leque Island Alternatives Analysis and Design

Project: Projects Coordinator Brokaw and Lands Agent Iris met with Snohomish County Public Works to discuss the County process for vacating road right-of-ways. Depending on which design alternative is selected as the preferred alternative for Leque Island, WDFW may need to work with the County to vacate right-of-way for Eide Road.

Fir Island Farm Final Design Project:

Projects Coordinator Brokaw met with Planner Brian Williams to get feedback on progress on the Fir Island Farm Monitoring and Adaptive Management Plan. After making a few adjustments, they will continue completing a draft of the plan for eventual review by the project's independent technical review team. In addition, Projects Coordinator Brokaw ran a diagnostic report and returned a malfunctioning water quality monitoring device to the manufacturer for repair. A spare water quality monitoring device is installed on the site to collect data while the malfunctioning device gets repaired.

Crescent Lake Unit: Snoqualmie Wildlife Area Manager Brian Boehm coordinated with two volunteers to continue spreading mulch on the access roads within the unit. The mulch was donated by Snohomish County and a tractor and loader was donated by one of the volunteers for the task. Manager Boehm also met with lessee Werkhoven Dairy to discuss the spring planting plan. Similar to last season, Manager Boehm plans on having a variety of crops for wildlife forage and cover including corn, barley, winter wheat and grass.

Ebey Island Unit: Snoqualmie Wildlife Area Manager Brian Boehm finalized contract negotiations with Sno-Valley Farms and submitted the package to Olympia for final signatures. The new agricultural lease is set to begin activity starting April 15. Manager Boehm completed



Biologist Anderson continues to work with Seattle Parks and Recreation staff on collaborative efforts, including heron camera work.

approximately 5,500 feet of exclusion fencing on the western portion of the unit. The lessee provided a farm laborer to assist in the project. Fencing is required to keep livestock off of Homeacres Road and neighboring private property.

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

Wildlife Management

Pacific Brant Aerial Photo Transect Pilot Project: Biologists DeBruyn and Danilson assisted Biologist Evenson in conducting aerial photo transect flights for Pacific brant in Skagit County. This pilot project involved conducting three separate trials of photo transect flights over the Skagit County bay area associated with the annual brant hunt in this area. Each year, a flight has been conducted to determine whether sufficient brant numbers are present to support having a limited hunting season. The objective of this pilot is to explore whether aerial photo transect surveys can provide accurate estimates that are more easily replicated and less prone to observer bias than the currently used approach. Pilot/EQIP Tech Kimbrel did a great job keeping on transect, maintaining corrected altitude and speed, and not crashing the plane.



Camera setup in "Bomb Bay" of WDFW's Partnovia for photographing Brant in Padilla Bay

Spring Bear Hunt: Biologists Danilson and Caldwell finalized and sent out the informational letter to hunters who were selected for the North Skagit and Monroe spring bear hunts. The letters notify the hunters that they need to attend an upcoming landowner coordination meeting

with Washington Department of Natural Resources and private timber company managers. Since WDFW has landowner agreements with many of the private landowners, regional staff helps coordinate and attends these meetings. Both meetings will occur on Saturday, April 12 at 10 a.m. (North Skagit unit tag holders and landowners) and 1 p.m. in Mill Creek (Monroe Unit tag holders).

North Cascades Elk Herd Population Surveys: Biologist Danilson coordinated with landowners and other project partners in preparation for upcoming population survey flights. Two rounds of flights are scheduled to occur the weeks of March 17 and March 31. Danilson contacted landowners to let them know that these flights would be occurring and requested permission for helicopter landing zones as necessary.

Waterfowl Aerial Surveys: Assistant District Biologist Cyra provided equipment support for Waterfowl Specialist Evenson's aerial surveys for black brant, as well as continuing discussions concerning time and place of waterfowl detectability surveys in conjunction with USFWS.

CITES Required Bobcat and River Otter Pelt Sealing – Biologist Anderson provided CITES pelt sealing to a handful or so harvested bobcats. While sealing the pelts Anderson provided information on the CITES requirement (as we always get asked) and provided tips to hunters on how to accurately sex cats.

Wildlife Areas

Island Unit: Skagit Wildlife Area Staff monitored water levels on the Island Unit. Higher river levels (over 17 feet on the Mt. Vernon gauge) continue to inundate lower areas. Manager Rotton borrowed an underwater camera from the Lacey Construction Shop to examine condition of the tide gates and culverts on the Island. The structure in the barn field is leaking and hopefully the camera will help diagnose the problem.



Visitors enjoying spring time weather at the Fir Island Farms Snow Goose Reserve.

Samish River Unit (Welts) Wetland Restoration Project: Projects Coordinator Brokaw and Skagit Wildlife Area Manager Rotton met to continue working on next steps for the project, including preparing to address comments from the public as part of the Special Use Hearing Examiner permit process. Additionally, the first project billing was completed and submitted to the Natural Resources Conservation Service (NRCS) for reimbursement.

Tennant Lake Water Level: The water level in Tennant Lake continues to be very high, preventing the opening of the lake elevated wood Boardwalk trail. Manager Kessler and Natural Resource Tech Deyo hiked in to clear beaver dams to help lower the water level in the lake.

Private Lands/Access

Spring Bear Hunt Coordination: Biologist Caldwell, DNR Forester Hurd and Technician Otto surveyed and documented spring bear hunt access conditions in the Monroe and Upper Skagit areas. Only one access gate was found to potentially be a problem for the 2014 hunt. DNR Forester Hurd will follow up to fix this problem.

The Nature Conservancy: Biologist Caldwell and Technician Otto surveyed and documented potential hunting and wildlife viewing opportunities on Nature Conservancy lands in Skagit County. They accessed habitat variable for suitability and conditions that could facilitate public access. One site was identified during this survey. Follow up will be conducted at a later date by Biologist Caldwell to negotiate possible cooperative land use in 2014-15.

Waterfowl Quality Hunt Site Enrollment: Biologist Caldwell spoke with two new land owners/farmers in Skagit County about potential enrollment in the 2014 Waterfowl Quality Hunt Program. Biologist Caldwell will follow up with each of these landowners to discuss access, hunting and migratory bird habitat project options regarding their lands.

Blakely Island Deer Hunting: Biologists Milner and Caldwell met with the forester for a major landowner on Blakely Island to discuss options for increasing deer hunting on the island. The high island population is making forest regeneration very difficult and the landowner is interested in decreasing the numbers of deer while respecting the complications of hunting on an entirely privately owned island.

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Wildlife Management

Wings Over Water Northwest Birding Festival: Biologist DeBruyn manned a viewing station at the end of Blaine Pier to show participants of this annual bird festival water and shore birds.

Coordination with Federal Agencies: Biologist Danilson interacted with the U.S. Forest Service biologist for the Baker District to resolve issues related to inclusion of the Mount Baker Wilderness Area in the high buck hunt, which has been recommended for the 2014 hunting

season. Danilson also worked on developing a response to a request from the superintendent of the North Cascades National Park to have Game Management Units (GMUs) that contain the Ross Lake and Chelan National Recreation Areas broken out so that Park Service staff can better understand harvest levels in these areas.

Skagit County Elk Conflict: Conflict Specialist Griffith and Conflict Technician Pinjuv spent most of the week installing an elk exclusion fence for a landowner along Highway 20 near Concrete utilizing some Master Hunter volunteer help for three of the days.



Elk exclusion fencing installation work was implemented by the landowner with assistance from WDFW Master Hunter volunteers.

Wildlife Areas

Region 4 Restoration Pathway Overview: Projects Coordinator Brokaw met with the new Ducks Unlimited area biologist, C.K. Eidem, to give an overview on how WDFW works with partners to complete habitat restoration projects on WDFW lands using a series of steps called the Region 4 Restoration Pathway. Brokaw and Eidem also discussed and visited two project sites in Region 4 that WDFW and Ducks Unlimited are partnered on, Leque Island and the Samish Unit.

Rainbow Pond Water Control: Two weeks ago the water control at Rainbow Pond collapsed and we lost $\frac{3}{4}$ of the water in the pond. Manager Kessler coordinated with Don Kraege our waterfowl manager and Ducks Unlimited engineers on replacing the damaged Rainbow Pond water control using Duck Stamp funds. We will try to get this control replaced as soon as possible by an emergency purchase. The water in this pond is critical to the water level in the

Lake Terrell and Terrell Creek system. This water is released during the summer to keep Terrell Creek charged for fish survival.

Beaver Damage: Whatcom Wildlife Area technician replaced wood riser boards that beavers had damaged. It appeared that a beaver was caught in the water control stand pipe and chewed its way out through the riser boards. The water level in the pond was lowered to replace damaged boards. This pond should refill now that the control has been repaired.



Lake Terrell Island Stabilization Plantings: Natural Resource Tech Deyo planted 300 Sitka willow cuttings and 300 bare root Pacific ninebark trees on the islands at Lake Terrell. These islands are used by waterfowl for nesting, and are eroding due to winter storms. Some of the islands also have hunting blinds on them. The trees and shrubs will help to stabilize the islands and prevent future erosion. This project was paid for with Duck Stamp funds.



There were 300 Sitka willow cuttings and 300 bare root Pacific ninebark trees planted to prevent erosion on the Lake Terrell Wildlife Unit.

Wildlife Area Access: Skagit Wildlife Area staff cleaned and replaced signs, picked up litter at Samish, Johnson/Debay Slough Reserve, Leque Island, North Fork, Jensen, Fir Island Farms Reserve and Headquarters units. Staff pruned and limbed alder trees and blackberries at the Headquarters Unit, including areas along the river dike, boat launch, main parking areas, and entrance road. Gravel was placed at the restroom at Headquarters. Gravel was placed at Eide Road parking lot apron to improve vehicle access on Leque Island. Staff removed over 900 feet of four-strand barbed wire fence on the Island Unit in preparation for the next phase of the ditch maintenance project.

Wiley Slough Restoration: Manager Rotton received comments back from Dike District (DD) #22 Representatives on the pump station agreement. Edits were reviewed with Habitat Biologist Brian Williams. Draft will be updated and a meeting set up with Lands Agent Kye Iris and DD#22 representatives.

Snoqualmie Wildlife Area: Snoqualmie Wildlife Area Manager Brian Boehm continued plans for a volunteer “clean up” event with the Monroe Rod and Gun Club. Members of the club would like to donate some time to assist with general maintenance and trash removal from the facility.

Private Lands/Access

Waterfowl Quality Hunt Site Breakdown Update: Technician Otto continued performing quality hunt site breakdowns in Skagit County. These sites have been difficult to remove due to heavy rain water and muddy conditions.

Volunteer Coordination for Hunter Harvest/Success Monitoring: Biologist Caldwell coordinated with Hunter Education & Volunteer Coordinator Steve Dazey to develop a prototype survey box for management review.

Blakely Island Deer Meeting: Biologist Caldwell and Biologist Milner met with a private land manager about the possibility of deer hunting on Blakely Island. The land manager was informed on access, hunting and time options regarding their lands.

Western Washington Agricultural Association Meeting: Biologist Caldwell met with Executive Director Roozen to discuss private lands logistics related to harvest management. Details were established on the fair market values of different crop types. These values will assist managers in coordinating habitat enhancement efforts for waterfowl in 2014.

GOAL 4: BUILD AN EFFECTIVE AND EFFICIENT ORGANIZATION BY SUPPORTING OUR WORKFORCE, IMPROVING BUSINESS PROCESSES, AND INVESTING IN TECHNOLOGY

Personnel Change: This week was Technician Pinjuv’s last week with WDFW. Thanks for the good work you have done here in Skagit County and best of luck in your future endeavors!

Radio Communications Committee: Assistant District Biologist (ADB) Cyra and Customer Service Specialist Powers participated via video link in a Radio Communications Committee meeting. This was the first time in five years that the committee has met and the meeting was called to address a number of important issues concerning staff and radio use. Discussions were held concerning expanded use of WILDCOM to non-enforcement staff, updating staff contact information, updating and expanding training materials, increased carry of radios in work alone situations, and updating and standardizing the radio fleet. In preparation for the meeting, ADB Cyra had discussions with users statewide and worked on maintenance of the program radio list and training materials.

Space administration: Assistant District Biologist Cyra initiated communications concerning the archiving of department files from previous regional administrations. Stored files are taking up space for equipment needed for new and ongoing activities. Considerable time will be involved in reviewing the files to insure compliance with State archiving procedures.

REGION 5

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Wildlife Management

Black-tailed Deer Research Project: Research Scientist and Chief Investigator Rice, private contractors Northwest Helicopters, and Biologists Bergh and Holman again attempted adult doe captures associated with the black-tail research project in the Washougal (568) GMU. The adult females are captured by helicopter net-gunning. Conditions were good and three additional study does were captured in GMU 568 during a half-day effort. This brings the Washougal “cluster” of study black-tails up to six individual does for 2014.

Once captured, the does are outfitted with collars that record the deer’s location every five hours and convey this information to a satellite. The collars also generate a traditional VHF signal for field location. Ultrasound technology is also used to assure that the does are pregnant prior to inclusion in the study. The does are



Black-tailed deer capture

then additionally outfitted with a vaginal implant transmitter (VIT) which communicates with the doe’s satellite collar. Upon birth, the VIT lets the collar know that fawns have been born and WDFW staff is notified by email and text message. Following notification, fawn searches are

initiated. Thanks to Northwest Helicopters, primarily pilot Jess Hagerman and net-gunner Brian Greenhaw (pictured) for their skill in this challenging capture effort.

Cackling Canada Goose Mark-Resight survey: Biologists in Districts 9 and 10 conducted the first round of surveys for collared cackling Canada geese in many areas throughout the region this week. The collars display unique characters which allow for a determination of individual birds. These surveys are an ongoing collaboration between the U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, Oregon Department of Fish and Wildlife, and California Department of Fish and Game in an effort to estimate the survival of cackling Canada geese. Additional surveys will take place March 19-20 and resulting observations will be compiled and reported in a later weekly.

Gray's Bay Tour: Biologist Miller, Wildlife Manager Hauswald, and Technician Sample toured the area surrounding Gray's Bay this week to share information on resource use in the bay. Water conditions were very high due to Columbia River flows. Heavy fog made some of the area pretty interesting to travel through. We did observe some white wing and surf scoters which are not regular users of the area.

Columbian White-tailed Deer: Biologists from WDFW and USFWS captured and euthanized a deer with abnormal hooves that had been captured and then released on Puget Island last week. Diagnostic samples were collected and sent to Colorado State University (CSU) and the Washington Animal Disease Diagnostic Laboratory (WADDL) labs for analysis. The yearling buck appeared to be pretty healthy outside of the hoof irregularities. Two pellets were recovered beneath the skin from shotgun shells.

Wildlife Areas

Mt. St. Helens Wildlife Area – Erosion Control: Work was started on Mt. St. Helens Wildlife Area spreading an erosion control grass seed mix on the river bank of the North Fork Toutle to slow erosion. This mix is applied annually, in early spring, before the growing season begins to allow the seeds a chance to germinate. There are a few areas of recent erosion on the west end of the bank that probably took place during the heavy rain events of the past few months. Lower areas of the bank with a constant seep of water flow seemed to be less stable, and more slough off was observed, than at higher and steeper areas.

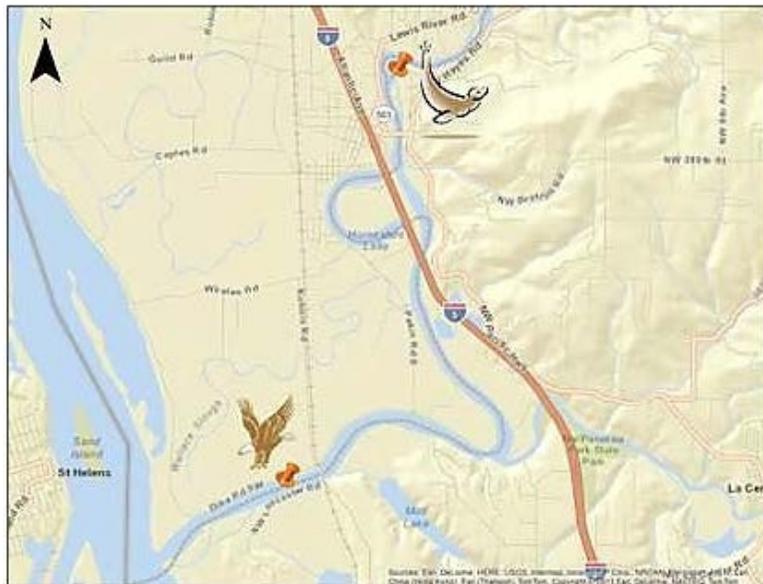
Klickitat Wildlife Area – Barn Demolition: WDFW Construction Crew Supervisor Tosland completed the demolition of the big barn on the Sondino Unit this week (see photos). The floor inside the building was excavated to a depth of four to six feet, and the walls were tipped toward the pit and used as fill. The concrete footings and floor slabs were also broken up and added to the fill. The soil, which was reserved to one side of the pit, was put back over the fill and hay spread over the project site. Usable beams and posts were collected and set aside for re-use in a future project. The area within the footprint of the building is very close to a pond occupied by western pond turtles and should now serve as additional turtle nesting habitat since the building is gone. Supervisor Tosland and assistant Hurley did a nice job of converting an unusable structure to valuable wildlife habitat. Manager Van Leuven and Technician Davis hauled away debris left from an earlier phase of the project for disposal.



Sondino Unit barn demolition

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

Wildlife Management



Watchable Wildlife: A run of Smelt up the Lewis River has brought more than the usual numbers of wildlife species to the Woodland area and is offering unique wildlife viewing opportunities. While conducting a cackling Canada goose survey, Biologist George observed 70 bald eagles (17 adults and 53 juveniles) in a ½ mile stretch along a lower stretch of the North Fork Lewis River. Upstream, Woodland residents and visitors have been observing sea lions loafing around and feasting on the abundance of

smelt throughout the past week. Up to 20 sea lions have been seen at any one time in the river adjacent to town. The bald eagles can be observed feeding along the Dike Road in the Woodland Bottoms and the sea lions can be seen from State Route 503 just past the seawall in the town of Woodland. The run is tapering off in the Lewis River, but is forecast to continue to some degree for the next couple of weeks as smelt continue to move up the Columbia River.

GOAL 3: PROMOTE A HEALTHY ECONOMY, PROTECT COMMUNITY CHARACTER, MAINTAIN AN OVERALL HIGH QUALITY OF LIFE, AND DELIVER HIGH-QUALITY CUSTOMER SERVICE

Wildlife Management

Wildlife Conflict – District 9: Conflict Specialist McDonald signed a Damage Prevention Cooperative Agreement (DPCA) with a Trout Lake dairy owner. The dairy has been experiencing elk damage to their hay fields for the past several years and is in the process of fencing the fields. The dairy owners have hazed elk out of the field with noisemakers and several Master Hunters from the Region 5 Elk Damage Hunt pool have successfully hunted on the property.

Wildlife Conflict – District 10: Conflict Specialist Conklin met with a Wahkiakum County land owner to discuss Goose damage. He has been suffering a substantial loss this time of year on his grass hay. Conklin issued him a noise device and also spoke to him about possibly having a Goose damage hunt on his property in the future. Conflict Specialist Conklin has been networking with Master Hunters who may have an interest to haze deer from the Curtis Airstrip. In addition, Conflict Specialists Conklin and McDonald are working together to experiment with using Grizzly Bear scat as a bio-fencing method to deter Black Bear from a land owner who has a small stand of trees experiencing damage.

District 10 and Mt. St. Helens Wildlife Area Winter Conditions

Past Weather: December and January temperatures and precipitation were below normal, with little snowfall below 2,000 feet. February started off cold with 5-10 inches of snow accumulating to the valley floor. Rainfall for the month of February was above average and temperatures were below average. Temperatures have begun to moderate in March with close to normal temperatures and sunnier days.

Short-Term Forecast: Snow levels will fluctuate between 2,500 to 6,000 feet for the upcoming week. The 6-10 and 8-14 day forecast are for below normal temperatures and normal precipitation.

Long-Term Forecast: The March forecast is for an equal chance for either above average, below average, or normal temperatures and precipitation. The three month forecast predicts above normal temperatures and an equal chance for above average, below average, or normal precipitation.

Habitat: Forage is available in lower and mid-elevations, with green up starting to show signs in the lower elevations.

Snow Depths: Lower elevations are snow-free.

Animal Concentrations: No unusual concentrations noted to date. The monthly winter elk survey was conducted on March 4 with 130 elk observed on the Mt. St. Helens Wildlife Area.

Animal Condition: Most animals observed to date appear to be in good to fair condition, with a few in poor conditions and with rough pelage.

Mortality: Wildlife Area staff has observed four mortalities so far this winter on the Mudflow Unit while conducting other work.

Public Contacts: None to report regarding winter conditions.

The Public is reminded the portion 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, 2014, to minimize disturbance and associated energy demands on elk wintering there.

MOUNT SAINT HELENS ELK HERD
 2013/2014 WINTER CONDITIONS - SNO-PARK SNOW DEPTH,
 NRCS SNOTEL DATA, AND SNOWPACK

From web page <http://www.fs.usda.gov/activity/giffordpinchot/recreation/wintersports/?recid=31178&actid=91>
http://www.wrcc.dri.edu/cgi-bin/sno_narr3_pl
<http://www.wcc.nrcs.usda.gov/snotel/Washington/washington.html>

SNOWPARKS:								
Name	Elevation	12/6/2013	12/13/2013	12/20/2013	12/27/2013	1/3/2014	1/10/2014	1/17/2014
MARBLE MT	2,700'	No report	4" new snow	No new report	No new report	No new report	No new snow, 2" base	Slush. No new snow.
WAKEPISH	2,800'	No report		1-2" snow	1-2" snow	2" snow	2" base	No new report

SNOWTEL STATIONS:

Name	Elevation	Stats	11/30-12/6	12/7-12/13	12/14-12/20	12/21-12/27	12/28-1/3	1/4-1/10	1/11-1/17
		Avg Snow							
JUNE LAKE	3,340'	Depth (inches)	0.66	5	5.3	7	6.7	7.9	22
		Min Temp (F)	14	19	23	29	31	26	31
		Max Temp (F)	45	27	50	54	51	47	55
		Avg Temp (F)	30	22	36.2	38.3	39.5	36.7	39.8
		Year to date precipitation (inches)	27	27	27.7	30.9	31.3	36.6	43.5

Name	Elevation	Stats	11/30-12/6	12/7-12/13	12/14-12/20	12/21-12/27	12/28-1/3	1/4-1/10	1/11-1/17
		Avg Snow							
SPIRIT LAKE	3,520'	Depth (inches)	2.43	3	0.86	0.86	0	1.3	3.5
		Min Temp (F)	11	18	21	29	30	20	31
		Max Temp (F)	46	27	52	51	52	46	54
		Avg Temp (F)	29	25	36.8	36.8	39.2	36.8	38.5
		Year to date precipitation (inches)	17.5	17.9	18.3	22.1	22.7	25.5	30.5

Name	Elevation	Stats	11/30-12/6	12/7-12/13	12/14-12/20	12/21-12/27	12/28-1/3	1/4-1/10	1/11-1/17
		Avg Snow							
PEPPER CREEK	2,140'	Depth (inches)	0.31	2	0.3	0.42	0	0	0
		Min Temp (F)	14	16	24	28	29	25	29
		Max Temp (F)	48	26	46	46	51	46	51

Avg Temp (F)	31.5	22	34.5	34.8	36	35.2	37.3
Year to date precipitation (inches)	13.1	13.5	13.6	15.3	15.6	17.9	21

Name	Elevation	Stats	11/30-12/6	12/7-12/13	12/14-12/20	12/21-12/27	12/28-1/3	1/4-1/10	1/11-1/17
SHEEP CANYON	3,990'	Avg Snow							
		Depth (inches)	4		7	8.6	7.9	11.7	25.5
		Min Temp (F)	12		20	28	29	23	30
		Max Temp (F)	43		50	51	50	50	59
		Avg Temp (F)	26		35.3	36.8	38.8	35.8	39.3
		Year to date precipitation (inches)	23.1		24.4	27.8	28.4	32.5	38.5

Name	Elevation	Stats	11/30-12/6	12/7-12/13	12/14-12/20	12/21-12/27	12/28-1/3	1/4-1/10	1/11-1/17
CALAMITY	2500'	Avg Snow							
		Depth (inches)	1	5.5	0.1	0	0	0	0
		Min Temp (F)	16	18	27	32	33	30	34
		Max Temp (F)	47	27	55	52	53	48	56
		Avg Temp (F)	31	23	39.2	41.2	42.3	39.8	43.3
		Year to date precipitation (inches)	18.8	22	20.3	23.2	23.6	27.4	32.7

Snowpack % of Avg Snow Water Equivalent	12/6/2013	12/13/2013	12/20/2013	12/27/2013	1/3/2014	1/10/2014	1/17/2014
JUNE LAKE	5%		13%	21%	14%	23%	33%
SPIRIT LAKE	122%		100%	48%	33%	73%	77%
SHEEP CANYON	20%		20%	27%	22%	38%	55%

1/24/2014	1/31/2014	2/7/2014	2/14/2014	2/21/2014	2/28/2014	3/7/2014	3/14/2014
No new report	No new report	6" new snow	14" new snow	No new report	No new report	No new report	No new report
No new report	No new report	5" new snow	No new report	12" snow	No new report	24" snow	12" snow

1/18-1/24	1/25-1/31	2/1-2/7	2/8-2/14	2/15-2/21	2/22-2/28	3/1-3/7	3/8-3/14
19.7	18.7	30.3	37.3	52.3	65.3	57.6	49.4
32	31	5	16	28	27	27	30
57	60	37	41	42	41	46	53
43	40.2	21.2	32.2	33	33.7	37	40.5

1/18-1/24	1/25-1/31	2/1-2/7	2/8-2/14	2/15-2/21	2/22-2/28	3/1-3/7	3/8-3/14
43.6	48.6	51.4	58.1	71.4	72.8	86.6	91.5

1/18-1/24	1/25-1/31	2/1-2/7	2/8-2/14	2/15-2/21	2/22-2/28	3/1-3/7	3/8-3/14
0.1	2.5	7.6	3.8	12.2	15.9	5.1	0.3
34	31	7	18	28	24	28	26
54	60	45	48	48	42	50	54
42.3	39.7	21.5	34.3	33.5	35.2	39.2	41.5

1/18-1/24	1/25-1/31	2/1-2/7	2/8-2/14	2/15-2/21	2/22-2/28	3/1-3/7	3/8-3/14
30.6	33	33.4	36.8	44.6	45.4	51.6	55.5

1/18-1/24	1/25-1/31	2/1-2/7	2/8-2/14	2/15-2/21	2/22-2/28	3/1-3/7	3/8-3/14
0	0	2.1	7.7	2.8	12	11.1	4.3
30	28	11	17	32	30	28	29
56	55	38	45	44	47	48	62

35.8	35.5	25.5	33	34.8	36	37.5	40.5
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21	22.9	23.2	27.8	35	35.4	41.1	43.3
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1/18-1/24	1/25-1/31	2/1-2/7	2/8-2/14	2/15-2/21	2/22-2/28	3/1-3/7	3/8-3/14
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24.1	22.8	32.2	37.6	53.4	67.4	56.6	49.8
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33	30	3	18	26	21	30	27
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54	56	37	40	41	45	46	53
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43	40.2	20	32.8	31.5	34.5	37	38.3
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38.6	42.3	43.4	49.4	60.7	62.3	73.8	79.7
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1/18-1/24	1/25-1/31	2/1-2/7	2/8-2/14	2/15-2/21	2/22-2/28	3/1-3/7	3/8-3/14
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0	0	1.1	1.7	2.1	2.7	0.5	0
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32	34	9	17	32	28	28	32
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54	54	37	39	46	46	51	56
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43.3	42.2	24.2	26.5	35.8	35.5	41.2	44.2
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32.7	36.2	36.7	37.3	51.2	52.1	58.5	62.5
------	------	------	------	------	------	------	------

1/24/2014	1/31/2014	2/7/2014	2/14/2014	2/21/2014	2/28/2014	3/7/2014	3/14/2014
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27%	29%	30%	34%	57%	55%	53%	51%
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42%	29%	44%	6%	107%	79%	no data	no data
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47%	44%	48%	56%	87%	78%	71%	64%
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REGION 6

GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE

Wildlife Management

Western Pond Turtle Hatchling Study: Biologist Tirhi continues to check three Western pond turtle nests at the Pierce County Recovery Site for signs of hatchling emergence. The three nests from last June will potentially be used in a hatchling survival study if nestlings are within and emerge. Tirhi added additional inner and outer cages around each nest to capture and contain emerging hatchlings until all have emerged and can be fitted with radio transmitters. Nests are checked every other day.



Western Pond Turtle nest showing inner and outer cages designed to protect and contain hatchling on emergence prior to attaching radio transmitters.

Date	2/4/2014		3/3/2014	
Pond	NW	SW	E	NW
Dissolved Oxygen	8.5	7.6	11.7	9.8
Total Phosphorous (mg/l; Low/high conc)	0/0		0/0	0/0
PH	7	6.25	7	7
Carbon dioxide (ppm)	9	10	5	11
Alkalinity (Phosphorous/total alkalinity)	0	0	0	0
	108	72	52	62
Chlorine/Chloramine	0	0	0	0
Nitrate (ppm)	<1	<1	0	1
Hardness	90*	52	32	38
Sulfide	0	0	0	0
Silica	not taken			
Ammonia	0	0	.5-1 ^b	2-3 ^b
Iron(ppm)	trace	trace	0.25	0
Turbidity/Sedimentation (JTU)	0	5	2.5	2.5
Fecal Coliforms	present	present	present	present
Chlorophyll-a	once per year (summer)			
Water Temperature (C/F)	not taken	not taken	10.3 (50.54)	12 (53.6)
<small>*possibly high due to testing error (unfamiliarity)</small>				
<small>^b Maximum acceptable at 0.5a PH and Temp = 10.5</small>				

Biologists from Districts 11 and 15 participated in the annual Western Pond Turtle Working Group meeting. Tirhi presented preliminary findings on water quality testing at the Pierce County Recovery Site. Water quality testing was begun to seek potential causes of shell disease which has been identified in turtles at the recovery site.

Preliminary water quality results for the Pierce County Western Pond Turtle Recovery Site.

Oregon Spotted Frog: Biologist Tirhi collected eggs from two locations for the spotted frog genetic connectivity study. Tirhi will finalize collection this week and deliver samples to HQ. Tirhi and staff also collected spotted frog eggs (20 eggs from 18 clusters from 3 breeding locations) and delivered those eggs to three rearing facilities: Cedar Creek Correctional Center (100 eggs), NW Trek (200 eggs) and Woodland Park Zoo (800 eggs).



Oregon spotted frog eggs collected for delivery to three facilities participating in the captive reared (head start) program (egg masses flagged in background).

Dungeness Elk – Collaring: Biologists McMillan and Ament assisted Point No Point Tribal Biologist Tim Cullinan with the ground capture and collaring of a Dungeness cow elk. The plans were to put out another VHF collar in the herd. Tim was actually the lead for this project and handled all immobilization drugs. It took some patience and some re-positioning of our team to finally have the elk in a suitable darting location. Tim served as shooter and made a successful shot on the largest cow in the herd. Biologist McMillan and Ament helped with elk handling/monitoring, collaring, and administration of medications. This large cow went down on a fairly steep slope in tall, dense salal. The team dealt with a few challenges, but was able to successfully complete their mission. The elk recovered quickly and was actually back with the herd that evening.

Dungeness Elk – Collaring Update:

Biologists Cullinan and Ament had put a GPS collar on a cow elk in the Dungeness herd the previous week. It took the cow a few days, but she was finally able to locate and join back up with the group of cows and calves (plus one bull). Biologist Ament checked on all elk the evening of March 13. The two newly collared elk cows were contently bedded down with the herd. Tribal and district biologists are very pleased that the



Dungeness elk cow recovers after collaring on March 11.

Dungeness herd now has a cow with a new VHF collar and a cow with a new GPS collar. The collars on these elk are essential to help prevent elk/vehicle collisions along Highway 101.



Dungeness elk cow recovers after collaring on March 11.

Taylor's Checkerspot Butterfly (TCB)

– **Larvae Search:** Biologist McMillan spent some time on March 11 checking for TC larva at Three Crabs Road, Helen Marshall WDFW Parcel and Jamestown/Jake Hall/Cemetery Road area. Weather was suitable and several areas have multiple host plants in zones where there is open ground. No larvae were observed. Biologist Ament spent some time on March 10 and March 13 conducting TC larvae searches at the WDFW property at Three Crabs. An adult TCB had been observed at the property on May 4 last year. The weather conditions were more suitable for the survey on March 13. There was sunshine with shadows both days, but a very strong cool breeze on the March 10. She spent a few hours each visit intensively looking over vegetation in the vicinity of where the adult TCB was observed last season. Plantago plants were located throughout the area. Some were in more open disturbed areas, but some were difficult to find in dense grass with other vegetation. No larvae were located during the search efforts. A few Plantago plants had evidence of foraging on leaves but it is unknown if TCB larvae had conducted the feeding.



The 3 Crabs Site where a Taylor's Checkerspot Butterfly was seen last year.



Left: *Plantago* plant. Right: *Plantago* plants along disturbed old road bed.

Bald Eagles Shot: Sergeant Anderson arrived at Biologist Ament's residence on March 15 with two dead bald eagles. He had received a report about the eagles from a Seattle fisherman who observed them when he was hiking down to fish that morning on the Calawah River just east of Forks. Both eagles (one adult and one juvenile) were located under a large tree that was visible from the "A" Road. The closest known eagle territory is on Rayonier property approximately 1.2 down river. There was suspicion that the two male eagles may have died from injuries inflicted from a territorial battle or possibly from being shot. Anderson and Ament spent time thoroughly looking over the injuries the eagles each had suffered. With a keen eye, Anderson was able to locate a very small polymer ballistic tip from a rifle bullet in one of the injuries on the adult eagle. The two were then able to locate bullet exit wounds on each eagle. Biologist Ament will be taking the eagles into Greywolf Vet Hospital today to have x-rays taken to see if any bullet fragments may be located in either eagle. Unfortunately (and as with many eagle shooting cases), Sergeant Anderson has no leads for this case. The eagles had likely been dead for a day or two before being seen by the fisherman. He will be contacting the USFWS Officer Steve Furrer to report the incident. Biologist Ament suggested that a press release be issued for local newspapers to report the eagle killing and seek any information about the case. She will initiate work on this task with Sergeant Anderson and staff in Public Affairs.



**Above: WDFW Sergeant Eric Anderson with the two dead eagles.
Below: Ballistic tip from bullet found in one of the injuries on the adult eagle.**



Private Lands /Access

Wildlife Conflict: Conflict Specialist Novack conducted a field visit to Sequim with Department of Transportation (DOT) Biologist Kelly Mcallister to evaluate a site for potential construction of an elk highway elk crossing structure. Significant questions exist as to the long-term cost/benefit and, likelihood of success. Further evaluation from DOT is forthcoming.

Novack also collaborated with Enforcement to tranquilize and relocate a doe and fawn from a plant nursery within Olympia city limits. Enforcement had been called to the site after the owner reportedly shot one deer. The three animals somehow entered the fenced facility and severely browsed a number of nursery plants. The two remaining deer were successfully relocated to Capitol Forest.

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

Wildlife Management

Cackling Canada Geese: Biologists Hoenes, Sundstrom and Michaelis completed cackling Canada goose surveys in Grays Harbor, Pacific and Thurston counties. Surveys were completed as part of a multi-jurisdictional (Oregon, Washington, British Columbia, USFWS, etc.) effort to estimate the size of cackling Canada goose populations that winter in Oregon, Washington and southern British Columbia. Population size is being estimated using mark-resight data that is collected by observing collared cackling Canada geese during surveys. The second part of this survey effort will occur next week, so results will be summarized then.

GOAL 3: PROMOTE A HEALTHY ECONOMY, PROTECT COMMUNITY CHARACTER, MAINTAIN AN OVERALL HIGH QUALITY OF LIFE, AND DELIVER HIGH-QUALITY CUSTOMER SERVICE

Washington State

Trappers: Biologist Hoenes, in cooperation with Region 6 Enforcement personnel, attended the Washington State Trapper's Association spring rendezvous that was held at the Grays Harbor Fair Grounds in Elma. The primary purpose of the rendezvous is to provide an annual event where trappers can sell their pelts, visit with other



One of the many demonstrations at the Washington State Trappers Association spring rendezvous. This demonstration was related to making an effective beaver set.

trappers, as well as to learn new techniques that are presented at one of the many seminars that are offered. Biologist Hoenes and Enforcement were there to provide trappers the opportunity to have their pelts sealed if they had not already done so. In all, WDFW sealed 67 otter pelts and 25 bobcat pelts.

Wildlife Areas

Citizen Advisory Group Meeting: Assistant Manager Gallegos and Manager Gerchak worked on the wildlife area update in preparation for the Citizen Advisory Group Meeting they will be hosting on March 20. Gerchak worked on renewals for Agricultural Leases for Davis Creek and the Hoxit wildlife areas. Both leases provide benefits to waterfowl in the Chehalis valley.

Davis Creek Repairs: For the past few weeks wildlife staff members Robert Van Blaricom and Denny Van Blaricom have been working on repairs to the residence at Davis Creek. The complete inside has been repainted. The house is an old farm house built in the 1900s. Denny and Robert's efforts have given it a new life. Once the water and repairs to the back porch are completed, we hope to get a tenant. This will help with security of the area and program income for Davis Creek.



Scatter Creek Fence Damage: Wildlife Area staff made last minute repairs to the fence at Scatter Creek prior to a scheduled field trail that weekend. A vehicle accident took out about 60 feet of fence. As with most vehicle accidents to the Scatter Creek fence, this one also was not reported. We received emails of appreciation from the club for our quick response.

Temporary fence repairs at Scatter Creek.