

# Wildlife Program

Week of February 18-24, 2013

## **REGION 1**

### *GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDIFE*

#### Wolf Activities

**Aerial Effort:** Conflict Specialist Shepherd assisted Wolf Biologist Becker with the aerial wolf collaring effort in the fixed wing spotter plane. Conflict Specialist Shepherd discussed Smackout and Ruby Creek wolf sightings with U.S. Air Force Survival School employee Todd Foster who along with private citizens has recently observed wolves in the Ruby Mountain area. Shepherd produced and delivered electronic maps of a recently dispersed Smackout Pack wolf to Region 2 Biologists Jeff Heinlen and Scott Fitkin.



*Aerial wolf collaring effort using net guns in the Diamond pack territory.*

**Livestock investigation:** Supervisor McCanna was notified by Biologist Rasley of a possible livestock depredation. Officers Vance and Nelson assisted Biologist Rasley in the investigation with Olympia being notified. Biologist Rasley will complete paperwork and send to Donny Martorello upon completion. Rasley spent most of the week investigating livestock mortality

along the Tucannon River in northern Columbia County. Officers Nelson and Vance assisted with the complete investigation. It was determined that the cow died from natural causes and was fed upon after she had died. The cattleman agreed with us and was very appreciative with our immediate response.



*WDFW investigated this livestock mortality in northern Columbia County and determined the cow died from natural causes and was fed upon after she died.*

## ***GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE***

### **Wildlife Management**

**Golden Eagle occupancy surveys:** District Biologist (DB) Wik spent one afternoon checking the six nests in Charley Creek, finding the pair on the same nest as last year. It is unclear whether all six nests in this area belong to the same pair or if there are multiple pairs in the area. Over the years, there has yet to be more than one pair documented in the area. Assistant District Biologist (ADB) Vekasy completed occupancy survey at territory in northern part of District 3 where he found two adults present, but no nesting activity yet.

### **Wildlife Areas**

**WT Wooten Wildlife Area – Elk Fence Gate:** Wildlife Area Manager Bob Dice retrieved a trail camera mounted on the elk fence near a one-way gate on Friday. Dice set the camera at the gate one month ago. Pictures and video retrieved from the camera show elk moving through the gate. Quite a few elk were seen outside the fence in nearby wheat fields just one day prior to when the majority of the photos and video were captured. With over an hour's difference between the first photo and the last, and activity seen in video clips, Dice assumes that a lot of

elk passed through the gate and back on to the wildlife area. Wildlife area staff checked the elk fence one day after the elk returned to the wildlife area and found where many had pushed through the fence some time earlier. The sequence of events and pictures suggest that when elk in this area escape through the fence into the Peola unit, they usually return through one-way gates. Also caught on camera were two mule deer, a cougar, and Natural Resource Technician (NRT) Debby Flynn while she was checking the fence.



*Elk gather to take turns passing through a one-way gate in the elk fence near Mountain Road (above). A cougar considers passing through the one-way gate (below).*





*A young bull elk prepares to pass through the gate.*

## **REGION 2**

### **Wolf Activities**

**Wolf Management:** Biologist Heinlen responded to a report of large canines being spotted on the Scotch Creek Wildlife Area and met the reporting party on site. In mid-January the reporting party (RP) spotted three “large, dark” canines a fair distance off on a ridge looking like they were pouncing for mice in the snow. The RP did not initially report this observation, but did show Biologist Heinlen the location of the earlier sighting. Last week, the RP sighted one “large, dark” canine near the same area “with many tracks present.” Biologist Heinlen found a dead deer and many tracks at this location; however, the small track size (average 2.5” wide by 3” long) and short stride length of 14” were not consistent with wolf activity. In addition, the melted-out condition of the tracks further hampered identification. The RP was told to keep Biologist Heinlen informed of any future observations and try to get photos of the animals.

### ***GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE***

### **Wildlife Management**

**Washington ground squirrels:** Biologists Finger and Gregory and Technician Hastings spent the week on the annual Washington Department of Fish and Wildlife (WDFW) translocation of

Washington Ground Squirrels. This year we removed squirrels from the Warden Middle School as well as the Sage Hills Golf Course which has served as a source for several years. Overall, capture frequency was down at the golf course compared to previous years. This may be due in some part to a lower density of available animals resulting from years of removing pregnant females from the population. By the end of the week, we captured 55 animals, 9 males and 46 females. All of the females captured and translocated should be around mid-term and none were observed that appeared close to lactating, so the timing was ideal. We transported all animals to the release site at the Columbia National Wildlife Refuge west of Othello and released them in pairs into enclosures. We are looking forward to tracking squirrel using the artificial nest chambers and burrow complexes adjacent to the enclosures. As always, trapping animals is a lot of fun and a lot of work. We could not have completed this year's effort without the volunteers who generously gave their time with much enthusiasm. We were fortunate enough to have help from U.S. Fish and Wildlife Service (USFWS), Central Washington University, WDFW's Fish Program, and dedicated wildlife volunteers.

**Bighorn Sheep Surveys:** Biologist Heinlen conducted aerial surveys of both the Sinlahekin and Mt. Hull herds. Heinlen classified 99 sheep on Mt. Hull including 42 rams (6 <1/2 curl; 21 >1/2 <3/4 curl; 15 >3/4 curl), 46 ewes, and 11 lambs. This represents a near total count for this herd and indicates the population is doing well and above the herd plan objective.

By contrast, only 11 animals (ewes) could be located in the Sinlahekin herd despite extensive aerial searching. Additional searching from the ground yielded a group of five ewes and two lambs, all of which showed signs of Psoroptes mange (a skin disease caused by tiny mites). The lambs appeared more negatively affected than the ewes with more heavily crusted ears and loss of hair around the horns. Photos of these lambs and ewes were passed on to WDFW veterinarian Dr. Kristin Mansfield.

In advanced cases, mange can cause some animals to develop extensive hair loss over much of their body which can contribute to poor body condition and may even lead to death. This may be one factor in the low lamb recruitment observed during last year's surveys and may be affecting current herd distribution and demographics. Biologists will be conducting additional ground counts to assess herd status and health.



*Mt. Hull bighorn rams (left) and Sinlahekin bighorn lamb (right). Jeff Heinlen photos.*

## **Private Lands/Access**

**Hunter Access:** Biologist Wisniewski assisted Biologist Dougherty with Hunting Access geodatabase so he could get annual letters sent to Adams County cooperators. Dougherty began meeting with landowners to discuss Hunter Access contracts and boundaries. Through the course of these meetings Dougherty was able to renew all the contracts with landowners that he was able to meet with, and thereby successfully reenrolling 14,494 acres while adding an additional 2,886.1 acres of previously un-enrolled property.

All totaled Dougherty was able to secure 17,380 acres for hunter access in Adams County. Dougherty will continue to meet with and reenroll landowners with expired or nearly expired Hunter Access Contracts.

## **REGION 3**

None

## **REGION 4**

### ***GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE***

#### **Wildlife Management**

**Stillaguamish/Skagit Delta Western Hemisphere Shorebird Reserve Network Celebration:** February 23 was the community celebration for the designation of the Greater Skagit/Stillaguamish Delta as a site of Regional Importance within the Western Hemisphere Shorebird Reserve Network, an international program that strives to recognize and protect important places for shorebirds.

In partnership with Gary Slater of Ecostudies Institute, Milner planned an evening celebration that was the showpiece of this year's 8<sup>th</sup> annual Port Susan Snow Goose Festival. Approximately 80 people came to see guest speakers Rob Butler and Charles Duncan discuss shorebird conservation and ecology. Region 4 Director Bob Everitt served as master of ceremonies, and a team of WDFW volunteers stepped up to help the event run smoothly. Helpers included Russ Link, Belinda Rotton, Kye Iris, Paul Debruyne and Chuck Gibilisco.

In addition to the celebration, Milner participated in several activities during the two-day festival. These included teaching a basic shorebird identification class, co-authoring a presentation with Slater, and participating in Saturday and Sunday shorebird field trips. Additional information related to the two-day event is available at:

<http://www.heraldnet.com/article/20130223/NEWS01/702239897/0/SEARCH>

<http://www.heraldnet.com/article/20130210/LIVING/702109987/0/SEARCH>



*Western Hemisphere Shorebird Reserve Network Director Charles Duncan and WDFW Regional Director Bob Everitt in front of new Shorebird Reserve Network sign (above). A hearty group of festival attendees brave the cold and wind to watch shorebirds at the WDFW Jenson Access site overlooking Skagit Bay (below).*





*Dr. Rob Butler delivers the Keynote Address during the Saturday night shorebird celebration.*

**Northern Puget Sound Lesser Snow Goose Study:** Biologists Danilson and DeBruyn conducted another snow goose aerial survey which included the Fraser River Delta in British Columbia, coastal Whatcom County, the Skagit River Delta, Port Susan Bay, and associated inland areas. Ten flocks were observed and only four radio collars relocated during the flight. More than half of all geese observed were on/around Fir Island, where three very large flocks were observed.



*A flock of snow geese on a grass field near Port Susan Bay.*

A third and final photo count was also conducted by Canadian Wildlife Service Biologist Sean Boyd, which confirmed that the overwintering population of lesser snow geese in North Puget Sound (including the Fraser) was around 67,000 with the percent young estimated to be about 19% of the total population.

Danilson also coordinated with Biologist Evenson and Region 4 Private Lands staff in preparation for the final snow goose captures for the season. This work, which involves capturing and implanting 10 geese with satellite transmitters, will begin on October 25.

**Swan Mortality and Morbidity Project:** This week WDFW technician Anderson responded to calls of sick, injured and dead swans in Skagit, Snohomish and Whatcom counties. The number of swan carcasses collected continues to decline as with the number of reports associated with the swan hotline. This week only three swans were collected by Anderson. All three were trumpeter swans which are believed to have collided with power lines.

	Skagit	Snohomish	Whatcom	Sumas	TOTAL
Power line suspect	28	5	27		60
Lead suspect	26	1	13	4	44
Trauma*	6		7	6	19
Unknown	15		3		18
Feather Pile	8		4	6	18
TOTAL	83	6	54	16	159

**Midwinter Swan Survey:** Biologist DeBruyn finished compiling the results of the midwinter survey of swans in western Washington and the lower mainland of British Columbia. The 13,000 plus swans was the highest count ever.

	Trus Ad	Trus Juv.	Trus Total	Tun Ad	Tun Juv.	Total Tun	Unk.Ad	Unk. Juv	Total Unk.	Totals
<b>Whatcom</b>	2057	401	2458	90	9	99				2557
<b>Skagit</b>	5854	876	6730	1183	188	1371	902	75	977	9078
<b>Snohomish</b>	693	155	848	20	1	21				869
<b>King</b>	98	5	103			0				103
<b>Island</b>	491	68	559			0				559
<b>Totals</b>	9193	1505	10698	1293	198	1491	902	75	977	13166

**Sea Duck Joint Venture (SDJV) Marine Waterfowl Surveys:** Marine Waterfowl Specialist Evenson, and Assistant District Biologists Cyra and Murphie concluded three weeks' worth of aerial surveys in marine waters of British Columbia (BC). These surveys are a continuation of Sea Duck Joint Venture (SDJV) funded structured waterfowl surveys along the Pacific coast of North America. Similar surveys are taking place along the Atlantic coast. In previous years, surveys were flown along the outer coasts of Oregon and Washington. These baseline surveys are the first complete look at wintering locations and concentrations for most of these marine areas and will lead to further analysis to determine the best way to sample these species. Winter

surveys are being performed to see if they present a more complete picture of population numbers since breeding surveys are hampered by the cryptic nesting location and widespread distribution of these species. WDFW performed these surveys due to experienced crews, available resources, and lack of available staff in BC. Information on SDJV is available at <http://seaduckjv.org/>

**Oregon Spotted Frog Survey Project:** Biologist Danilson provided orientation for new seasonal Biologist Cindy Johnson, who began work on February 19. Johnson is working with existing databases and GIS to identify new landowner contacts for Oregon spotted frog (OSF) surveys and already renewed contacts with landowners who allowed us to conduct surveys on their property in past years. Danilson and Johnson attended to other project logistics this week including field equipment, vehicles, and other issues. Johnson and her counterpart, who begins in the next week, will begin surveys late next week or the week of March 2.

This will be the third year that District 14 personnel have conducted OSF surveys in Skagit and Whatcom counties. The objective of the project, funded by USFWS, is to further delineate the geography range of this sensitive species to inform the Endangered Species Act listing process. Surveys will be conducted from late February through mid to late April.

### **Wildlife Areas**

**Nooksack Unit Wood Ducks:** Manager Kessler coordinated with a volunteer checking, repairing and replacing wood duck boxes on the Nooksack Unit.

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

### **Wildlife Management**

**North Skagit Spring Bear Hunt:** Biologists Danilson and Roozen continued to coordinate with landowners and prepared to schedule a meeting with landowners and hunters who draw a spring bear tag for the North Skagit and Monroe hunt units in Region 4. Roozen discussed meeting dates with key people, began drafting landowner agreements, and updated hunter access passes and data forms. Planning and coordination for the Skagit and Monroe bear hunts will continue over the following weeks. The tentative meeting date for separate meetings with the two landowner-hunter groups is being set for early to mid-April.

**North Cascades Elk Herd Clover Trapping Project:** Traps were relocated on Tuesday and attended to over the course of the week by District14 personnel and tribal partners. By close of business on Friday, no more elk had been captured and the traps were shut down for the weekend. The primary objective of this work is to maintain a broad distribution of radio collared elk in the population as part of the “mark-resight” methods used to estimate the population during late winter aerial surveys. It is a cooperative project between WDFW and the Upper Skagit, Swinomish and Sauk-Suiattle Indian Tribes.



*A cow elk checks out a spike elk just moments after this Clover trap was triggered on February 17. WDFW and tribal biologists were able to release this elk within two hours of the capture.*

### Private Lands/Access



*The WDFW crew completed the Samish Boat launch last week. Wet gardens, ADA loading ramp, toilet, fence, and asphalt paving will be added in June.*

## Wildlife Areas

**Island Unit:** Natural Resource Specialist (NRS) Greg Meis and Natural Resource Technician (NRT) Curran Cosgrove continue to monitor water conditions at the Island Unit. In an effort to improve field drainage, a beaver deceiver was recently installed in one of the main drainage ditches. NRT Cosgrove continues to monitor the beaver activity along drainage ditches and culverts on the site.



*Drainage improved on the Island Unit following installation of the beaver deceiver.*

**Leque Island Unit:** Natural Resource Specialist Meis and Natural Resource Technician Cosgrove installed a new blind and repaired an existing hunting and viewing blinds on the ponds on Leque Island.

**Samish River - Welts Property Wetland Enhancement Project:** Restoration Projects Coordinator Brokaw submitted a draft Joint Aquatic Resource Permit Application (JARPA) and other documents required to schedule a pre-development meeting with Skagit County. This meeting is required to identify which County permits need to be acquired for the project and is scheduled for March 14.

**Stillwater Revetment Removal Project:** Restoration Projects Coordinator Brokaw drafted and sent out a press release for two public meetings that are scheduled for February 27 and March 7 at 6:30 p.m. at the Duvall Firehouse and Sno-Valley Senior Center, respectively.

Engineer Bob Barnard completed a review of the latest flood level modeling completed by Wild Fish Conservancy. The model projects no increased risk of flooding upstream and downstream of the project area due to implementation of the project. Barnard largely concurs with the model in his review.

**Outside Funding Opportunity:** Restoration Projects Coordinator Brokaw and Manager Link completed a partnership form for a North American Wetlands Conservation Act (NAWCA) grant Ducks Unlimited is writing. The grant would provide support for projects at the Stillwater and Cherry Valley units.

**Tennant Lake Boardwalk:** Manager Kessler monitored the water level at Tennant Lake. He hiked in and adjusted the beaver dams and deceiver pipes. The lake water level is slowly dropping, but is still too high for the boardwalk to be opened to the public.

**Lake Terrell Handicapped Accessible Blind:** Manager Kessler coordinated with the Washington Waterfowl Association on (WWA) building the new handicapped accessible hunting blind at the Lake Terrell unit. The construction will be done in July after all waterfowl nesting is completed.

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

#### **Wildlife Management**

**Waterfowl Input on Skagit Wildlife Area:** Biologists Danilson and Roozen met with Wildlife Area Manager Rotton, Enforcement Sergeant Phillips, and Officer Lee to review and discuss suggestions from local Washington Waterfowl Association members regarding the management of the Welts property near Samish Island.

A number of suggestions (aimed at addressing overcrowding at the site) were provided a few weeks ago and the group met to discuss the feasibility of each. This group will meet with WWA representatives next week to discuss potential changes that can be incorporated before next season.

#### **Wildlife Areas**

**Skagit Forks Restoration Proposal:** Manager Rotton discussed the feasibility study that Watershed Steward Bob Warinner is proposing for the next round of funding with the Recreation Conservation Office (RCO) and Salmon Recovery Funding Board. The Skagit Fork proposals will exam the potential to restore off channel habitat in the Skagit Forks area of the river which includes two WDFW ownerships, Cottonwood Island and Skagit Forks.

**Leque Island:** Manager Rotton is coordinating with representatives from Vista Clara, a water research group regarding two proposed sampling wells on the Leque Island site. Lands Agent Kye Iris is working to provide a Right of Entry permit for the ground water research project.

Manager Rotton participated in a conference call with representatives from the Washington Department of Transportation (WSDOT) and other WDFW regional staff to discuss the impacts of the Highway 532 elevation and the widening of the Davis Slough Bridge. WDFW staff is working with WSDOT to insure that the highway project moves forward on schedule, but continues to provide the needed public and management access necessary on this site.



*Snow Geese began using the Leque Island Unit just in time for the Snow Goose Festival.*

**Terrell Creek State of the Watershed Report:** Manager Kessler reviewed and commented on a new watershed report on the Terrell Creek watershed put together by the group, Chums of Terrell Creek.

### **Private Lands/Access**

**Waterfowl Quality Hunt Program:** Technicians Otto and Deyo continued unit removal and cleanup. Otto and Deyo sorted, organized, and inventoried blind materials and discarded unusable materials. Only those units that are inaccessible or have permanent blinds remain on site, and staff will appropriately handle those in the following weeks and months.



*Waterfowl Quality Hunt Program unit blind before removal.*



*Waterfowl Quality Hunt Program unit blind before removal.*

## **REGION 5**

### ***GOAL 1: CONSERVE AND PROTECT NATIVE FISH AND WILDLIFE***

#### **Wildlife Management**

**Western Pond Turtle Management:** Biologist Holman prepared a PowerPoint presentation describing work conducted during 2012 in the Columbia River Gorge related to management of the State Endangered western pond turtle. The presentation summarizes work accomplished and includes sections on habitat management, the head-starting program, participation by the Oregon Zoo and Woodland Park Zoo, bullfrog control, environmental education, population estimation, etc. Highlights of the 2012 pond turtle season in the Gorge include release of the 1,357<sup>th</sup> head-start turtle, participation in the Population and Habitat Viability Analysis, and development of population estimates for the Sondino site. The presentation will be delivered during the annual western pond turtle coordination meeting to be held next week.

**Golden Eagles:** Biologist Stephens and Technician White conducted a golden eagle (GE) survey on the Klickitat Wildlife Area. A pair of adults was observed in this area two weeks ago and we are now trying to determine if this pair is nesting. There were approximately 12 bald and golden eagles in the area, feeding on deer carcasses. Later in the day Biologist Anderson spotted an adult GE and an older sub-adult GE perched together in this area.

Biologist Anderson conducted a site visit to remote golden eagle territory in the upper reaches of Rock Creek of eastern Klickitat County. This area is a mix of federal, state, and private

ownership and represents one of the most unique landscapes in Region 5. A pair of golden eagles was seen in the drainage, but no nest site was located. Due to the remote nature of this area, a follow-up ground and aerial survey will be needed to determine the nest location for this pair.



*One of the most unique landscapes in Region 5 is a remote golden eagle territory in the upper reaches of Rock Creek of eastern Klickitat County.*

**Columbian White-tailed Deer Relocation:** Biologists Miller, Bergh, and Holman assisted U.S. Fish and Wildlife with the ongoing effort to relocate Columbian white-tailed deer from the Julia Butler Hansen Wildlife Refuge (JBH), near Cathlamet to Ridgefield Wildlife Refuge. The JBH Refuge is in danger of being flooded due to the imminent failure of a levy, which keeps the Columbia River from entering the Refuge. Ridgefield Refuge has suitable habitat (riparian forest and low elevation shrublands) for the deer. To date, 15 white-tails have been moved upstream to Ridgefield Refuge and released. A mortality associated with the relocated deer has been documented and attributed to a combination of movement-restricting mud and coyote predation.



*Columbian White-tailed Deer Relocation.*

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

### **Wildlife Management**

**Deer Management:** Biologist Anderson responded to two different people interested in deer hunting in eastern Klickitat County. One person is a large landowner that lives in Clark County, but owns and hunts Klickitat County for mule deer. He indicated that he believed deer numbers were down on his property and expressed concern about a continuing trend.

### **Private Lands/Access**

**Conservation District Meetings:** Biologist Stephens and Technician White attended a Conservation District Producers meeting in east and west Klickitat County. Stephens and White spoke briefly about WDFW's Private Lands program explaining that they were looking to partner with landowners to provide hunting access opportunities and enhance habitat for wildlife on private lands. Several questions were asked and an informational handout was left for those interested in learning more about the program. One landowner expressed an interest in enhancing the oaks on his 2,000 acre property.

**Region 5 Master Hunter Elk Damage Hunt:** Biologist Stephens continues to coordinate the master hunter elk damage hunt by responding to requests from LE Officers for master hunters to assist with elk damage on private lands. The master hunters called upon are from a pool that successfully drew this special permit for 2012-13. Over the past two months the requests for master hunters have increased significantly. To date 24 elk depredation hunts have taken place in Region 5, nine of which occurred in February. The current success rate for this hunt is 67%.

**Vancouver Lake:** Access staff Spangler and Rhodes filled in potholes at the cattle guard using an asphalt cold patch, which worked well. In addition, Spangler and Rhodes sprayed moss killer on the restroom and parking area, removed a large and messy dump pile consisting of tires and junk, and replaced a no parking sign at the west gate and missing Discovery Pass sign at the entrance.



***Access staff upkeep at Vancouver Lake included filling in potholes (left) at the cattle guard and spraying moss killer (right) on the restroom and parking area.***

## Other

### **District 10 & Mount St. Helens Wildlife Area Winter Conditions**

**Past Weather:** January temperatures and precipitation were both below average for the month. A cold dry period of weather persisted throughout the month with low snow levels, but no significant snowfall below 1,000 feet.

**Short-Term Forecast:** The 6-10 day and the 8-14 day forecasts are for above normal temperatures and precipitation.

**Long-Term Forecast:** The one month and forecast model shows below normal temperatures and an equal chance for above average, below average, or normal precipitation. The three month forecast model is for below normal temperatures and precipitation.

**Habitat:** Forage is available at lower elevations, and elk appear to have fed heavily on willows and cottonwoods in the mudflow unit, while most areas above 2,500 feet currently have some snow cover, and areas above 3,000 feet have significant snow cover.

**Snow Depths:** See attached table for detailed information.

**Animal Concentrations:** No unusual concentrations of elk noted to date. On February 5, 2013, a total of 142 elk were present on the Mudflow Unit monitoring area.

**Animal Condition:** The vast majority of animals observed to date appear to be in good to fair condition, a few were observed with rough pelage on the mudflow this past week.

**Mortality:** Three mortalities were observed on the mudflow this week.

**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.

### **District 9 Winter Conditions**

**Past Weather:** Mild winter conditions dominated District 9. Dry conditions continued throughout the District for most of this week.

**Winter Severity:** The Klickitat Wildlife Area continues to be mostly free of snow and eastern Klickitat County is generally snow free and early green up has started. In the southern Cascades, snow levels retreated this week as mild weather continued.

**Forecast:** A strong storm is forecast to hit the southern Cascades this weekend. Snow levels are predicted to drop to approximately 2,000 feet and drop in excess of two feet of new snow into the southern Cascades.

**Habitat:** Habitat continues to be open below 2,000 feet in the south Cascades, and precipitation has been below normal levels.

**Animal Concentrations:** No unusual concentrations have been reported for big game this past week. Deer numbers are low in eastern Klickitat and animals are dispersed.

**Animal Condition:** Deer and elk appear to be in very good condition and no winter stress/mortality has been reported this week. Multiple groups of deer and elk observed by WDFW staff this week and all animals appeared healthy.

**Mortality:** None reported this week.

**Public Contacts:** None.

MOUNT SAINT HELENS ELK HERD  
 2012/2013 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.wrcc.dri.edu/cgi-bin/sno_narr3.pl)  
<http://www.wcc.nrcs.usda.gov/snotel/Washington/washington.html>

SNOWPARKS:		12/07/2012	12/14/2012	12/21/2012	12/28/2012	01/04/2013	01/11/2013	01/18/2013	01/25/2013	02/01/2013	02/08/2013	02/15/2013
Name	Elevation											
TRAIL OF TWO FORESTS	2,200'	No report	Trace of new snow	2ft of snow	More than 2ft of snow	No new report	No new report	No new report	No new report	10" new and 2 ft base	No new snow. 2ft total.	No new snow
MARBLE MT	2,700'	No new report	5" new snow	4ft of snow	More than 4ft of snow	No new report	No new report	No new report	No new snow. 72 inch base.	14" new and 80" base	No new snow. 84" base.	No new report
WAKEPISH	2,800'	No snow	5" new snow	42" of snow at the sno-park	More than 42" of snow	Sno-park inaccessible due to heavy snow	Sno-park inaccessible due to heavy snow	Sno-park inaccessible due to heavy snow	No new report	Sno-park inaccessible due to heavy snow	No new report	No new report

SNOWTEL STATIONS:

Name	Elevation	Stats	12/1-12/7	12/8-12/14	12/15-12/21	12/22-12/28	12/29-1/4	1/5-1/11	1/12-1/18	1/19-1/25	1/26-2/1	2/2-2/8	2/9-2/15
JUNE LAKE	3,340'	<b>Avg Snow</b>											
		<b>Depth (inches)</b>	12.3	26.8	68.8	103.3	101.6	97.3	93.3	88.4	103.1	98.2	98.4
		<b>Min Temp (F)</b>	30.9	27.5	25.7	27.5	18.7	23.7	17.2	28.6	29.3	26.2	24.6
		<b>Max Temp (F)</b>	43.9	37.8	35.2	34.5	35.1	40.3	47.1	63	39	49.6	42.4
		<b>Avg Temp (F)</b>	36.6	32.7	29.9	31.1	27	33	28.8	44.9	33.8	36.4	33.1
		<b>Year to date precipitation (inches)</b>	68	72	82.9	84.6	85.9	86.3	98.6	97.2	106.3	109.3	109.8
SPIRIT LAKE	3,520'	<b>Avg Snow</b>											
		<b>Depth (inches)</b>	1.1	9.6	19.1	27.8	26.1	19.7	20.1	18.1	25.9	24.7	25.3
		<b>Min Temp (F)</b>	31.5	19	19	22.3	20.3	25.3	9.9	27.7	28.6	12.7	23.2
		<b>Max Temp (F)</b>	48.4	41.9	44.4	35.6	41.7	46	54.4	54.3	42.1	48.2	43
		<b>Avg Temp (F)</b>	37.9	32.7	30.2	31.6	29.2	34.5	28.2	39.1	34.4	35.9	33.5

		Year to date precipitation (inches)	34.4	37.6	42.2	45.2	45.6	47.7	47.8	48.4	56.2	57.2	58.1
Name	Elevation	Stats	12/1-12/7	12/8-12/14	12/15-12/21	12/22-12/28	12/29-1/4	1/5-1/11	1/12-1/18	1/19-1/25	1/26-2/1	2/2-2/8	2/9-2/15
PEPPER CREEK	2,140'	Avg Snow											
		Depth (inches)	0	0.17	14.7	24	24.6	23.8	22.8	23	28.9	25.4	23.3
		Min Temp (F)	32.4	30.4	30	30.4	21.6	27	12.9	23.9	33.1	28.4	23.7
		Max Temp (F)	48	43.2	36.9	36.9	39	41.4	43.5	55.2	43.7	53.8	45.9
		Avg Temp (F)	40.2	35.4	33	33.8	28	33.3	26.5	33.4	35.4	36.2	35.5
		Year to date precipitation (inches)	22.2	23.7	29.9	31	31.3	33.8	33.8	34.3	37.3	38	38.2
Name	Elevation	Stats	12/1-12/7	12/8-12/14	12/15-12/21	12/22-12/28	12/29-1/4	1/5-1/11	1/12-1/18	1/19-1/25	1/26-2/1	2/2-2/8	2/9-2/15
SHEEP CANYON	3,990'	Avg Snow											
		Depth (inches)	12.6	25.7	61.3	96.3	93.6	88.4	84.7	81.4	102.7	102.5	103.4
		Min Temp (F)	29.1	21.9	23.4	25.5	20.5	23.7	14.5	25.5	28.2	24.1	23.9
		Max Temp (F)	42.6	36.5	33.8	33.6	39.9	39.4	54.4	58.5	37.8	52.5	39.2
		Avg Temp (F)	35	30.7	28.2	30.2	28.4	32.3	29.1	43.6	32.3	35.3	31.7
		Year to date precipitation (inches)	60.4	63.8	69.6	77.3	81.7	86.3	86.3	87	95.9	98.3	98.9
Name	Elevation	Stats	12/1-12/7	12/8-12/14	12/15-12/21	12/22-12/28	12/29-1/4	1/5-1/11	1/12-1/18	1/19-1/25	1/26-2/1	2/2-2/8	2/9-2/15
CALAMITY	2500'	Avg Snow											
		Depth (inches)	0	0	13	22	18.7	17.7	15.3	15	15.9	14.2	11.2
		Min Temp (F)	33.8	32.5	29.1	31.3	23.7	28	21.2	32.5	32.4	31.3	30
		Max Temp (F)	47.7	41.2	40.3	36.3	36.1	43.5	56.7	62.1	43.2	48	42.3
		Avg Temp (F)	40.2	35.6	32.8	33.4	29.1	36	32.2	47.2	36.3	39.2	35.8
		Year to date precipitation (inches)	42.1	44.5	52.2	54.6	54.8	59.2	59.4	60.1	66.4	67.5	68
Snowpack % of Avg Snow Water Equivalent			12/07/2012	12/14/2012	12/21/2012	12/28/2012	01/04/2013	01/11/2013	01/18/2013	01/25/2013	02/01/2013	02/08/2013	02/15/2013
JUNE LAKE			no data	no data	180%	134%	no data	no data	147%	139%	149%	no data	140%
SPIRIT LAKE			no data	200%	410%	134%	447%	371%	350%	286%	414%	535%	486%
SHEEP CANYON			86%	91%	151%	165%	170%	184%	169%	145%	164%	173%	160%

**02/22/2013**

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No new  
report

No new  
report

Sno-park  
inaccessible  
due to heavy  
snow

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**2/16-2/22**

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96.1  
25.7  
51.4  
33.3

111.5

**2/16-2/22**

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24.1  
21.7  
48.9  
33.5

59.2

**2/16-2/22**

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21.6  
24.8  
56.8  
34.9

38.9

**2/16-2/22**

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100.5  
24.4  
52.3  
31.5

100.3

**2/16-2/22**

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9.4  
30.6  
50.5  
36.3

69.2

**02/22/2013**

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130%  
398%  
159%

## **REGION 6**

**Elk Hoof Disease Sample Collection:** Biologists Hoenes, Michaelis, and Harris assisted WDFW Veterinarian Mansfield with the collection of three elk calves in Pacific County. Calves were collected as part of an ongoing effort to identify the cause of hoof disease that is prevalent in southwest Washington elk herds.

To learn more about hoof disease and the ongoing collection effort, please visit the Department's Wildlife Health webpage (<http://wdfw.wa.gov/conservation/health/>).

**Mazama Pocket Gopher Reserve Design:** Biologists Tirhi, Linder, and Schmidt along with Stinson attended the second pocket gopher reserve design meeting held by USFWS. The intent of the meeting was to continue to recommend and map large reserves in Thurston County that could potentially be used as reserves for pocket gophers as part of future recovery. In a previous meeting the group had agreed on a process that would identify the most important landscapes in need of management across the gopher distribution. Once those were identified, the group began to locate areas within that might be considered for more focused protection/management and which might serve a more vital role in gopher recovery. The areas surrounding those reserves but within the management area may be managed using different tools, including purchase of conservation easements, transfer of development rights, mitigation banking credit and/or set aside creation through development permits. The need for movement corridors between managed sites was also discussed. The creation of a reserve design for gophers will necessitate many meetings over a longer time period in order to create a product all are comfortable with.

**Chinook Unit:** Manager Guzlas continues to work with WDFW Real Estate on the acquisition of the Mattson parcels with Bonneville Power Administration (BPA) funding. WDFW secured this option on February 14 and it will be presented to the Commission for approval on Friday, March 1. WDFW surveyed the acquisition parcels last week and will be working with BPA over the next few weeks on several items.

**Amphibian Citizen Science Monitoring:** Biologist Tirhi in cooperation with Point Defiance Zoo and Aquarium conducted Amphibian Citizen Science Monitoring on Saturday. Twenty participants spent the first three hours indoors where they were trained to identify the eight most common species of amphibians in western Washington by egg, larvae, and adult stage. Special emphasis was given to identifying state endangered Oregon Spotted Frogs. Participants were also trained on data collection and use of data forms, equipment including decontamination procedure, and methods for conducting surveys and completing maps. For the afternoon session, attendees were bused to the Spanaway Marsh where they practiced wetland surveys, identification skills, GIS tracking, and data form completion. The group was joined in the field session by five participants that had attended an earlier training at Northwest Trek. All participants left with a WDFW volunteer hat, orange work vest for safety, field booklet including data forms, and maps of water bodies near their homes to survey. Attendees remarked that they had really enjoyed the day, felt very prepared for surveys, and intended to begin immediately (it is recommended that citizen scientists conduct one survey per wetland per month minimum).

**Streaked Horned Lark and Military Installations:** Biologist Tirhi along with biologists from USFWS, U.S. Department of Agriculture (USDA), Animal Damage Control (ADC), Joint Base Lewis-McChord (JBLM), and McChord Air Force Command toured the McChord Airfield to discuss the McChord Rodeo (International aerial competition) taking place in July. The Rodeo takes place on McChord every two years and involves aircraft and staff from around the world competing in events over one week. In addition to the Rodeo, McChord also hosts an annual air show for the public on the airfield.

Unfortunately, the events occur on occupied breeding grounds of the state endangered and soon to be federally listed Streaked Horned Lark. This is an endemic lark found on remnant prairies of the South Puget Sound, including the Fort Lewis, McChord, Shelton, and Olympia airfields, all of which were historically prairies that were converted to military bases or airports. Airshows potentially pose a significant threat to the long term viability of larks, particularly if they involve placing people or structures on/around nests or increasing the threats to chick or adult survival. WDFW has been successful in negotiating with Olympia Airport to move their airshow to the end of the nesting season and primarily outside of the breeding area. WDFW (and Center for Natural Lands Management) has urged McChord to do the same unsuccessfully for several years. Since each Rodeo is two years in the making, it is too late to change the timing or logistics for 2013. Therefore, the team met to discuss best ways to mitigate threats for 2013, but with the intent to plan for long term solution to both the Rodeo and Airshow.

The primary management tool used at each of the occupied airports to support larks is to mow the grasses at such a height to maintain the structural habitat that larks prefer (short grasses and interspersed bare ground). Larks often nest in April and then again in late May-June. The current plan is to conduct the first mowing to allow larks to early nest, but forego the later mowing to discourage larks from nesting in the primary Rodeo-use areas. Nest searches will also be conducted prior to the nesting season and nests will be flagged. All parties will reconvene to formulate a long-term plan to managing larks and airshows, possibly concurrently with other airfields.