



United States Department of Agriculture

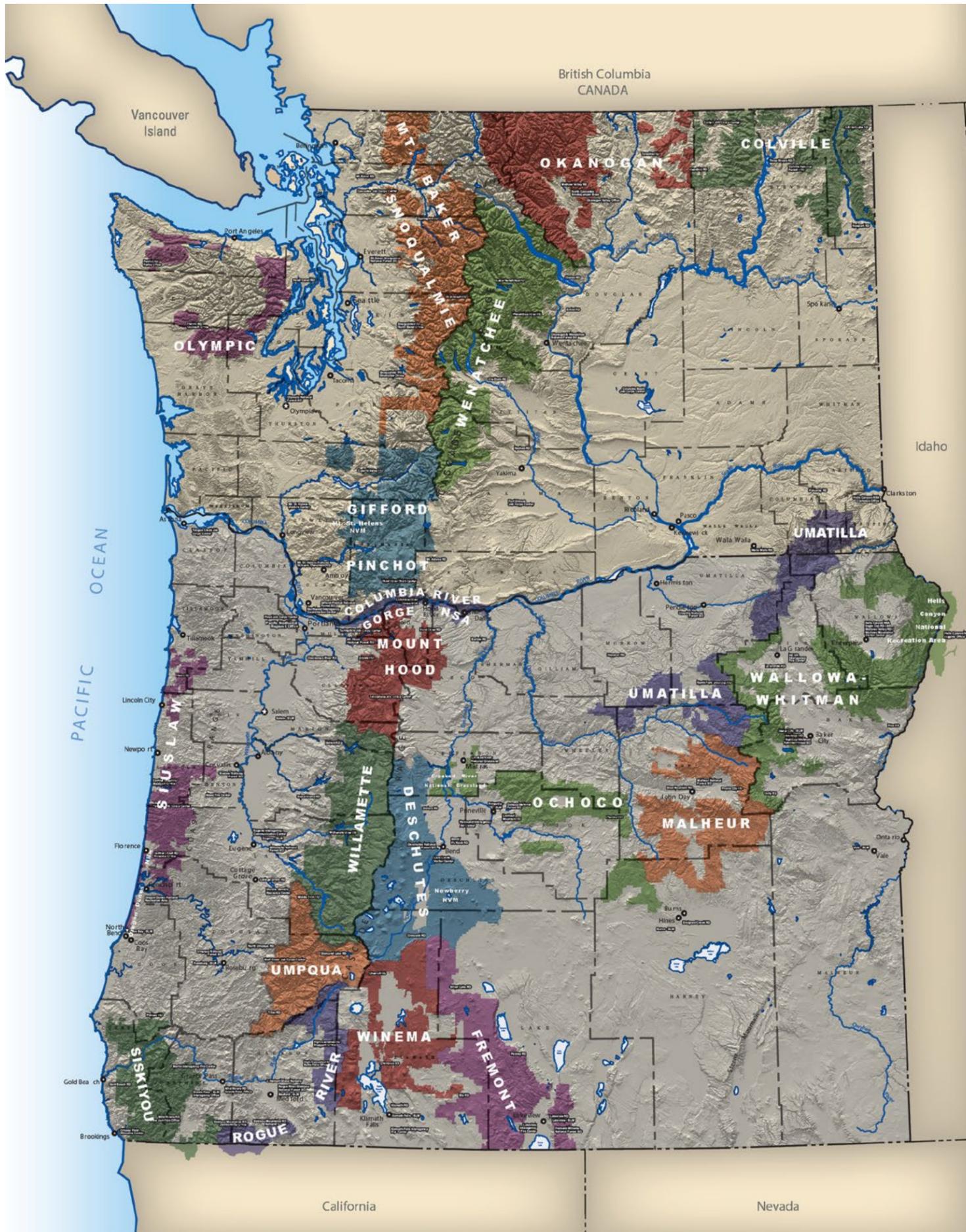
# Wildlife and Terrestrial Threatened & Endangered Species Programs

## 2017 ACCOMPLISHMENT REPORT



for the greatest good

# Pacific Northwest Region U.S. FOREST SERVICE



This document represents highlights from the work done by National Forests in Region 6 during Fiscal Year 2017 on behalf of wildlife and wildlife habitat conservation in Oregon and Washington. The Region has just over 100 dedicated wildlife biologists and wildlife technicians who tirelessly work to build partnerships, educate the public while also planning, implementing and monitoring wildlife habitat restoration activities across the 16 National Forests, one grassland and one national scenic area in Region 6.

This report is organized to highlight regional accomplishments as well as individual Forest accomplishments, which include a focused narrative on a specific project each Forest selected to highlight. The last section highlights the work being done by each of our Regional Centers of Excellence, which are comprised of District or Forest level biologists who serve as Regional resources for specific wildlife species or groups of species.

Please feel free and share this report with partners, other federal agencies, or any other interested publics. On the bottom of most slides are contacts for the individual biologists who are available to provide more information if desired. It is our hope that this report can be used to emphasize and celebrate the critical role National Forests in Oregon and Washington play in wildlife habitat conservation in the Pacific Northwest.



The Pacific Northwest Region has over 100 dedicated wildlife biologists and wildlife technicians. Working to build partnerships, educate the public, plan, implement and monitoring wildlife habitat restoration activities across the 16 National Forests, one grassland and one national scenic area. Back Row (L to R): Teresa Lorenz, Justin Hadwen, Barb Wales, Tricia Johnson, Monty Gregg, Kevin Keown, Joe Doerr, Dave Clayton, Kim Mellen McLean, Clark Reames, Karen Honeycutt, Josh Chapman, Deanna Williams, Jesse Plumage, Monte Kuk. Front Row (L to R): John Chatel, Mark Penninger, Carol Chandler, Carol Hughes, Amy Markus, Anne Poopatanapong, Lauri Turner, Lizzy Berkley, Susan Piper, Laura Navarette.

## Wildlife Program Accomplishments

Right: Regional and Washington Office wildlife biologists viewing a sage grouse lek outside of Baker City.



Left: Bat box building workshop at the Oregon Zoo.

- Coordinated the Wildlife Program Managers Meeting in Baker City OR, which included a special session on wildlife biologists leading integrated restoration planning on their Forests, a session for PNW research station scientists to provide updates on their work and a field trip to Hells Canyon. Worked with Mark Penninger and Jamie Ratliff in organizing, scheduling and arranging meeting.
- Reviewed and made recommendations for WO Supplemental Fuels, Challenge Cost Share, Land and Water Conservation Fund, Joint Chiefs and WO Supplemental Fuels Program grant funds.
- Continued to coordinate with both Washington and Oregon Departments of Fish and Wildlife and the BLM in conducting environmental sampling for the presence of white-nose syndrome in Washington State and baseline data for Oregon working with other regional staff.
- Attended five youth and science events at the Oregon Zoo including a free bat box building workshop and Bat Week
- Completed a new Master Stewardship Agreement with the National Wild Turkey Federation for Region 6.
- Worked on new elk security habitat standards and guidelines with the Forest Biologists, ODFW, WDFW, Confederated Tribes of Umatilla.
- Participated as a presenter at a NEPA/ESA training, Northwest Forest Plan training at the New Employee Orientation, and gave a Northwest Forest Plan and Late Successional Reserve Training on the Okanogan Wenatchee.
- Co-led the Integrated Vegetation Group and held a review on the Fremont Winema NF.
- Worked with the Oregon Connectivity Consortium to develop wildlife habitat connectivity models and messaging for the public, state and federal agencies.
- Worked with DRM to update "DecaID" the decayed wood advisor version 3.0 by giving it a website "facelift" for a better user experience and to update the vegetation and wildlife literature for the tool.

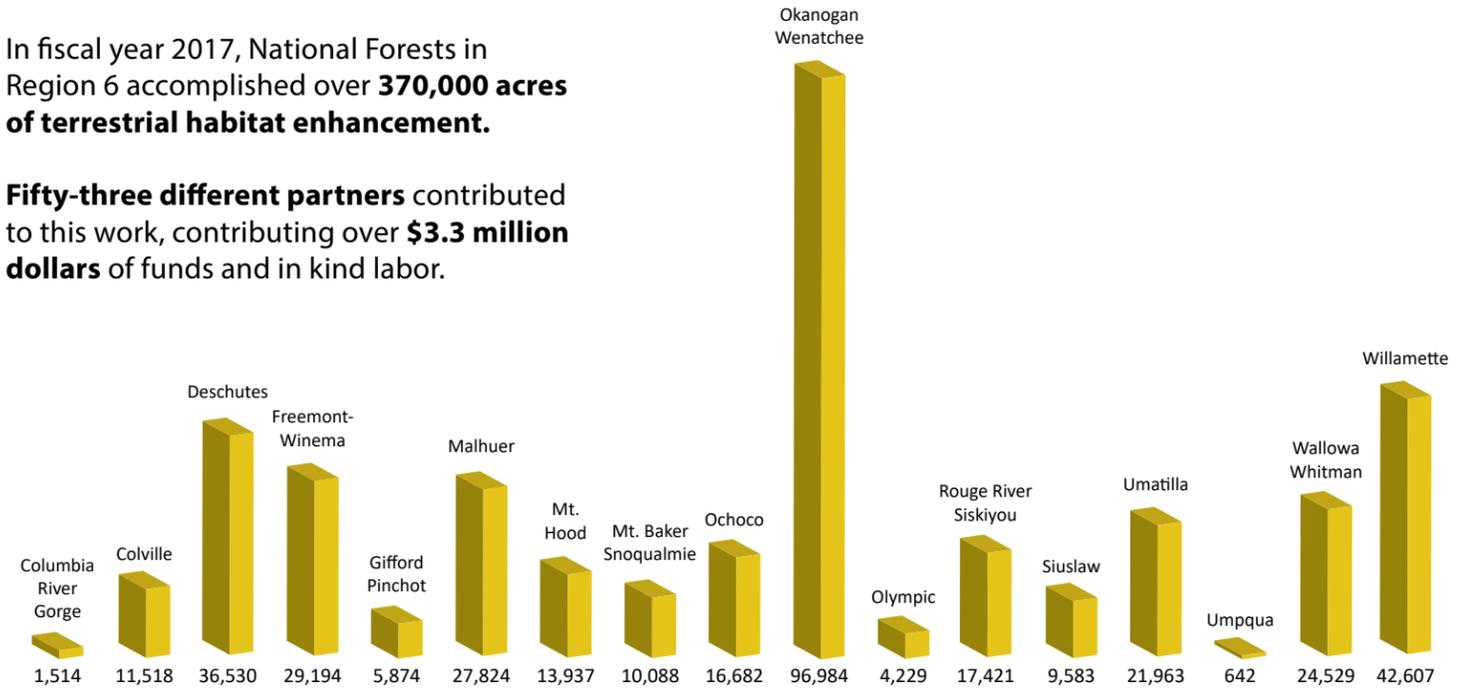
**PARTNERS & COOPERATORS** Oregon Department of Fish and Wildlife, Washington Department of Fish and Wildlife, Pacific Northwest and Northern Research Stations, Conservation Northwest, Rocky Mountain Elk Foundation, National Wild Turkey Federation, Oregon Hunters Association, Oregon and Washington Wildlife Societies, Blue Mountain Elk Initiative, Xerces Society, Defenders of Wildlife, Cascadia Wild, Oregon Zoo, Conservation Biology Institute

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## Terrestrial Habitat Enhancement

In fiscal year 2017, National Forests in Region 6 accomplished over **370,000 acres** of terrestrial habitat enhancement.

**Fifty-three different partners** contributed to this work, contributing over **\$3.3 million** dollars of funds and in kind labor.



Habitat and Species Management Treatments	Acres
Wildlife Habitat Improved	37,678
Non-native Wildlife Removed	32,272
Road Decommissioning	26,278
Road Storage	8,647
Game Habitat Improved	6,756
Guzzler Development	6,254
Pipe Capping Removal	5,819
Increase Large Wood	4,861
Mine & Cave Protection	4,018
Nest-Roosting Structures	3,008
Non-game Habitat Improved	3,005
Fence Removal	2,465
Bear Resistance Containers	1,091
Habitat Structure Additions	839
Fence Enclosure	794
Channel Reconstruction	425
Beaver Introduction	360
Road AOP Improvement	314
Ingress & Egress Ramps	299
Road Realignment	163
Spring Protection	126
Wetland Restoration	73
Soil Improvement	13
Invasive Non-plant Species Mgmt.	10
Structure Maintenance	8
Mine Reclamation	5
<b>TOTAL</b>	<b>145,581</b>

Vegetation Enhancement Treatments	Acres
Thinning-Pre-commercial	24,650
Thinning-Commercial	23,504
Invasive Plant Species Mgmt.	12,334
Thinning	8,976
Revegetation	7,244
Non-native Plant Treatment	4,570
Cavity Creation	3,627
Native Plant Restoration	1,493
Native Plant Treatment	861
Meadow Restoration	506
Forage Enhancement	506
Tree Release	318
Riparian Thinning	281
Pruning	114
Riparian Improvement	89
Pollinator Habitat Improvement	60
Riparian Native Plant Restoration	32
Trail Decommissioning	4
Rare Plant Protection	2
<b>TOTAL</b>	<b>89,171</b>

Fire and Fuels Treatments	Acres
Natural Wildfire	104,341
Prescribed Fire	31,870
Other Fuels Treatment	609
Wildfire Rehabilitation	84
<b>TOTAL</b>	<b>136,904</b>

## Interagency Special Status & Species Program (ISSSSP) Survey & Manage

The ISSSSP improved priority sensitive and strategic species conservation and inventory through coordination and funding field unit priority species work. 84% of program funds were sent to Region 6 national forests funding 34 inventory and monitoring projects and 8 conservation projects.



- Guided and improved species management and strengthened NEPA analysis through regional direction, oversight and updating many valuable conservation tools:
  - 8 conservation assessments
  - 71 species fact sheets
  - 1 site management plan
- Assisted three national forests in creating survey and site management efficiencies by applying a proactive approach to red tree vole (RTV) conservation (the RTV high priority site management recommendations).
- Improved relationship with ODFW, WDFW, and USFWS collaborating on priority rare species where we have common interests and needs.
- Made progress on resolving taxonomic issues for *Monadenia* terrestrial snails by initiating a morphology contract and a genetic sequencing agreement; collected and processed over 360 live snails both in-house and through collection contracts.
- Provided specimen identification services processing just over 600 vouchers of lichens, bryophytes, fungi and mollusks.
- Facilitated interagency fungi work group focusing on filling information gaps conducting historic site revisits for truffle species and developing products to address NEPA and fungi effects analysis for Sensitive and Survey and Manage species.
- Improved field unit survey and identification skills through coordination of two lichen and bryophyte training sessions.

**PARTNERS & COOPERATORS** ORBIC, WNHP, WDFW, ODFW, The Xerces Society, Biodiversity Research Collective, Smithsonian Institution, Oregon Wildlife Institute, USGS, PNW Research Station, OSU, University of Washington

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## Interagency Special Status & Species Program (ISSSSP) White-nose Syndrome

In coordination with the Region 6 wildlife program manager and invasive species coordinator, the ISSSSP program provided leadership in formulating the response, information sharing, and surveillance needs associated with the discovery of white-nose syndrome in bats in Washington State.



Want to learn more about White-nose Syndrome and how you can help protect bats? Visit [www.fs.usda.gov/detail/r6/home/?cid=FSEPRD501165](http://www.fs.usda.gov/detail/r6/home/?cid=FSEPRD501165).

**White Nose Syndrome**

**Frequently Asked Questions**

**Oregon and Washington**

**What is white-nose syndrome?**  
 White-nose syndrome (WNS) of bats is a disease caused by the fungus *Pseudogymnoascus destructans* (*Pd*; formerly known as *Geomyces destructans*). The disease is estimated to have killed over six million bats in the eastern United States and Canada since 2006, and can kill up to 100% of bats in a colony during hibernation. This fungus thrives in cold and humid microclimates found in caves and abandoned mines. Several species of bats require these same cold and humid microclimates for hibernation.

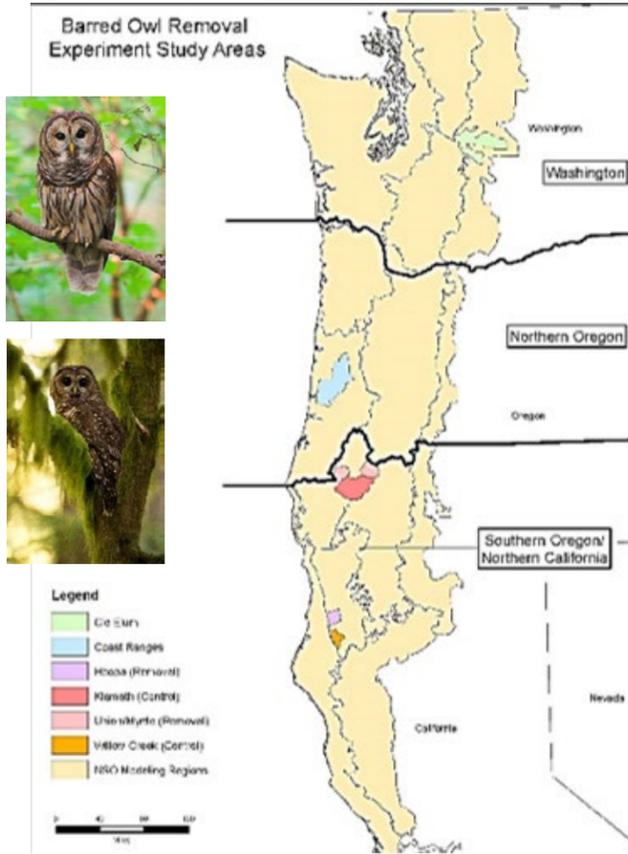
The disease received its name because infected bats are often observed with "white fuzz" around their nose and muzzle, and also on their wings, ears, or tail. The external white fungus may not always be visible, and is often absent when bats are found outside their roosts or hibernating sites. The fungus invades deep skin tissues and causes extensive damage. Infection by WNS causes the bats to arouse from hibernation during winter, which utilizes their very limited fat reserves and can ultimately lead to starvation and dehydration before spring, when their insect prey are available.

Bats with WNS may exhibit a white fungus growing on their muzzles, ears, or wings while in their hibernacula (roosts where they hibernate) during winter months. Abnormal occurrences of bats near cliffs, rocks or the entrances to caves or mines during winter, exiting and flying around in the daytime during cold winter weather, and dead or lethargic bats on the ground are behaviors associated with WNS.

- Increased agency presence and education efforts at "show caves."
- Collaboratively identified surveillance opportunities with WDFW and ODFW.
- Developed public information tools, including environmental education signs, postcards, and frequently asked questions to distribute to field units.
- Contributed to national white-nose syndrome team efforts working to improve and provide consistency in surveillance, improve decontamination/cleaning efforts at caves, and increase effectiveness of communication.
- Oversee content management of the Region 6 Forest Service public-facing webpage on white-nose syndrome, [www.fs.usda.gov/detail/r6/home/?cid=FSEPRD501165](http://www.fs.usda.gov/detail/r6/home/?cid=FSEPRD501165).

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## Threatened and Endangered Species Program



- Completed Oregon Spotted Frog aerial fire retardant BA and working with FWS to complete consultation.
- Completed interagency training NEPA and ESA training with NMFS and FWS on the Umpqua NF and ESA training for the forest leadership team on the Okanogan Wenatchee NF.
- Funded \$300,000 for priority projects to improve, protect, and better define sage grouse habitat.
- Evaluated the Land and Water Conservation Fund proposals for WO selection.
- Worked with Malheur and other national forests on 7(d) consultation approach for grazing.
- Completed Okanogan-Wenatchee NF program review.



**Below:** The program is working to reintroduce condors to the Pacific Northwest.



- Published "Estimating density of a territorial species in a dynamic landscape" Landscape Ecology (2017) 32:563-579.
- Supported the Interagency Experimental Barred Owl Removal Project. \$231,403 obligated through an Interagency Agreement. Organized the annual BAOW coordination meeting.
- Prepared the Annual Aerial Fire Retardant report.
- Signed the California Condor MOU for the reintroduction of condors in the Pacific Northwest.
- Visited to the Deschutes, Gifford Pinchot, Olympic, Siuslaw, and Okanogan Wenatchee National Forests.
- Participated in WDFW NSOIT modeling process.
- Participated in MAMU Technical Team Inland Survey Protocol revision process.

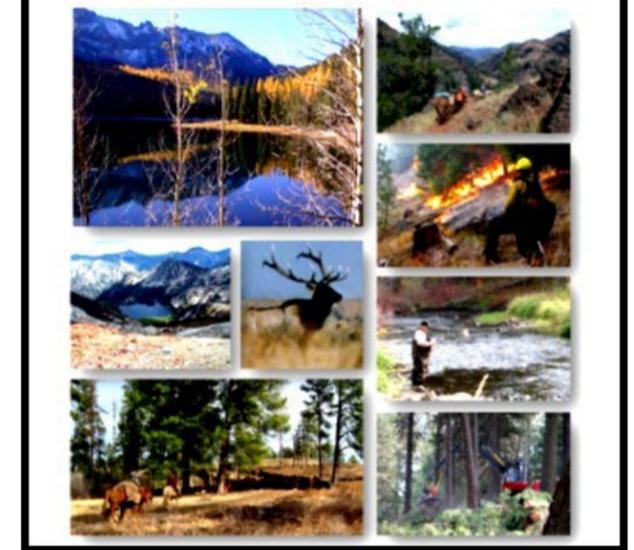


- Made focused investments (\$1.1 million) and leveraged at least \$4.6 million through Challenge Cost Share for the conservation of listed species (Grizzly Bear, Taylor's Checkerspot Butterfly, Bull Trout and anadromous species, etc.).
- Allocated funding for Oregon Chub and Modoc Sucker delisting monitoring.
- Assisted Blue Mountains and Colville NFs Forest Plan revision aquatic conservation strategies and ESA consultation.
- Lead ESA consultation effort on the Blue Mountain's Forest Plan Revision effort.
- Led the interagency Oregon Spotted Frog coordination meeting.
- Presented at regional staff officer, ecologist, fisheries, and wildlife program managers meetings and "Fire Effects to Wildlife" Rx 310 to Region 5.
- Worked with WDFW, ISSSSP and FWS to better understand information gaps and conservation needs on high priority species between our agencies.

- Conducted NEPA and ESA reviews on the Umpqua and Mt. Hood NFs.
- Invested \$113,500 in T&E monitoring funds on monitoring and integrated restoration projects for Woodland Caribou, Oregon Spotted Frog, Taylor Checkerspot and Oregon Silverspot butterflies, and Western Snowy Plover.
- Strengthened relationships with FWS (WA and OR state offices) through annual coordination meetings.
- Begin coordination with EPA, NMFS and FWS to get agreement on regional ARCS for future plan revisions.
- Worked with Colville NF to develop a gray wolf viability assessment.



### Blue Mountains National Forests Proposed Revised Land Management Plan



**CONTACTS** John Chatel, 503-808-2972  
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# Colville National Forest

In 2017, the Colville National Forest had a variety of projects and that contributed to wildlife habitat enhancement. Accomplishment highlights include:

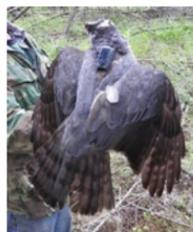
- Through partnerships with Defenders of Wildlife, Conservation Northwest, Pend Oreille County PUD, Seattle City Light, Kalispel Tribe of Indians, and Selkirk Conservation Alliance, placed food storage lockers in Panhandle, Pioneer Park, Edgewater Campgrounds to reduce the likelihood of grizzly bear/human conflicts to benefit 840 acres of habitat.
- Improved wildlife habitat with road closure improvements, unauthorized OHV (off highway vehicle) trail closure, revegetating obliterated roads, and road decommissioning on 1,924 acres.
- Improved habitat for migratory birds and big game through harvest activities on 3,180 acres.
- Prescribed fires improved 887 acres of big game habitat.
- Installed vent caps and water escape ramps to reduce wildlife mortality on 620 acres.
- Installed 2 gate replacements on mines to protect bats.



- Presented numerous environmental education programs.
- Monitoring Habitats and Populations:
  - Continued CFLR (Collaborative Forestry Landscape Restoration Project) monitoring to determine effects of harvest activities on:
    - Forage for white-tailed and mule deer
    - Goshawk territories and post-fledging areas
    - Moths, which provide food for several sensitive species
    - Snag levels and snag retention

• Conducted surveys for:

- Mammals: woodland caribou/winter recreation.
- Birds: goshawks, North American breeding birds, loon nesting.



Goshawk with GPS monitoring device.

• Monitored for:

- Grizzly bear core habitat/open and total road densities.
- Closed road effectiveness.
- Visitor Contact Patrols in Grizzly Bear Recovery Area
- Supported efforts to monitor for:
  - Wolf/livestock interactions
  - Caribou mortality
  - Grizzly bear populations and habitat use
  - Common loon wintering areas

BY THE NUMBERS		
ACRES	FUND CODE	ACTIVITY
12	BDBD	Prescribed Fire
113	CFLN	Road decommissioning, ingress-egress ramps, invasive species management
172	CMLG	Road decommissioning, road realignment
612	CMRD	Wildlife habitat improved
38	CWKV	Prescribed Fire
647	NFTM	Invasive species management
749	NFWF	Invasive species management, revegetation, riparian improvement, soil improvement
3,689	NFWF	Bear resistant container, mine-cave protection, pipe capping, revegetation, soil improvement, road storage
1,456	PTNR SSSC/Stewards	Road storage, ingress-egress ramps
3,191	hip	Road decommissioning, revegetation, commercial thinning
839	WFHF	Prescribed Fire
<b>11,518</b>	<b>TOTAL</b>	

## PARTNERS & COOPERATORS

Defenders of Wildlife, Conservation Northwest, Washington State University, Washington Dept. of Fish and Wildlife, Idaho Fish and Game, US Fish and Wildlife Service, British Columbia Ministry of the Environment, Biodiversity Research Institute, Boy Scouts of America, Idaho Panhandle National Forest, Seattle City Light, Rocky Mountain Elk Foundation, Selkirk Conservation Alliance, Kalispel and Kootenai Tribes of Indians, Scenic Canyons Recreational Services Inc., US Department of Homeland Security, Washington Department of Transportation, Pend Oreille Utility District, US Fish and Wildlife Service, various individuals.

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## Program Highlight

### Research and Monitoring of the Selkirk Mountains Grizzly Population

Below: Sibling grizzly bears at a "hair snag corral."  
Right: Installing a metal food storage locker.



#### MULTI-YEAR (2012 - 2020) INTERAGENCY EFFORT

- Objectives: Determine grizzly bear survival rates, population trend, and causes of death. Develop habitat use models for the ecosystem.
- Techniques: Assist with funding a USFWS bear trapping crew. Install wire "corrals" and rub posts to collect hair samples for DNA testing. Record bear presence with remote cameras.
- Results: Seven grizzly bears captured and fitted with GPS collars in 2017.
- The cooperators obtained photos and hair samples of grizzly bears at several corrals, and hair samples at rub posts. All collected materials sent to Wayne Kasworm, lead researcher with the USFWS.

#### Information / Education / Enforcement

- Presentations – bear identification, ecology, and safety to approximately; 22 campground hosts, 35 FS employees, 150 fire fighters assigned to the Noisy Creek Fire, and 200 4th and 5th graders.
- Visitor Contact Patrols – CNF Forest Protection Officers conducted more than 25 patrols to inform / educate Forest visitors about camping and hunting safely in grizzly bear occupied habitat.
- Habitat Improvements
  - Continued to install metal food storage lockers in developed (fee) campgrounds and heavily-used dispersed campsites. These lockers provide campers with a secure place to store food, beverages and other attractants. They are intended to reduce the potential for human-bear conflicts. The devices have been well-received / used by the public.
  - Installed 22 food storage lockers on poured cement pads. Various partners provided funding for the purchase of these structures.

## PARTNERS & COOPERATORS

BC Ministry of Forests, Lands, & Natural Resource Operations, Conservation NW, Defenders of Wildlife, Idaho Dept. of Lands, Idaho Fish and Game, Idaho Panhandle NF, Kalispel and Kootenai Tribes of Indians, Pend Oreille County Public Utility District, Seattle City Light, Scenic Canyons Recreational Services Inc., US Fish and Wildlife Service, Washington Dept. of Fish and Wildlife.

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# Columbia River Gorge National Scenic Area

In 2017, the Columbia River Gorge National Scenic Area (CRGNSA) participated in several projects to benefit wildlife. Accomplishment highlights include:

- Native seeding in prescribed burn areas to improve oak savannah habitat, near Lyle, WA
- Planted pollinator attracting plants near Mosier, OR.
- At Sandy River Delta: treated invasive plants, planted native riparian vegetation; continued building buck-and-rail fence with Youth Education and Support Services (YESS) volunteers to protect wetland and riparian habitat for wildlife and fish
- Maintained nesting habitat for western pond turtles in the Collins Creek area, WA, through mowing, weed treatments, and native planting.
- Thinned encroaching fir in Oregon white oak habitat for Western Gray Squirrel; created wildlife brush piles and snags; topped/slit select snags for bats; and removed old fence at Catherine Creek area, WA.
- In-house or contracted surveys: bumblebees (15 species observed), endemic Gorge caddisflies and stoneflies (3 entirely new species discovered), harlequin ducks.
- Peregrine falcon and bald eagle nest site monitoring.
- Interpretation/Education (I&E) – Child/student/adult outreach through: campground programs; county fairs; environmental events and programs (e.g. Water Jam, Eco-Blitz, Salmon Fest, Pollinator Week, Sandy River Planting, Urban Nature Overnight, Salmon Watch, Bonny Butte Raptor Migration, Pollinator Week).



Landscape shortly after prescribed burn and native seeding at Catherine Creek area, Washington.



Building resource protection fence with Youth Education and Support Services volunteers at Sandy River Delta, near Troutdale, OR

BY THE NUMBERS	
1,514 acres	Terrestrial habitat enhancement (core/integrated/partner)
\$413,500	Partner contributions
155	I&E Presentations

**PARTNERS & COOPERATORS** OR Dept. of Fish and Wildlife, WA Dept. of Fish and Wildlife, WA Conservation Corps, Skamania and Klickitat Co. Noxious Weed Control Boards, Mount Hood Community College Youth Education and Support Services, WA Dept. Natural Resources, Ash Creek Restoration, Lower Columbia Estuary Partnership, U.S. Fish and Wildlife Service, Sandy River Watershed Council, Cape Horn Conservancy, Friends of Sandy River Delta, OR Dept. of State Lands, Friends of Columbia Gorge, Oregon Watershed Enhancement Board, National Wild Turkey Federation, East Multnomah Soil and Water Conservation District, Friends of Trees, National Forest Foundation, World Salmon Council, Center for Eco-Dynamic Restoration, commercial river outfitters, local schools.

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## Program Highlight Western Pond Turtle

The Western Pond Turtle (WPT) is a Forest Sensitive species and a Washington State Endangered species. In the spring and summer, western pond turtles are found in ponds, lakes and rivers. They dig nests in nearby sunny areas, in dry soil amongst sparse vegetation. WPTs generally over-winter in upland forest, or sometimes in aquatic environments.

Located between Wind Mountain and Dog Mountain, near Home Valley, WA, Collins Ponds hold the second largest population of pond turtles in the Columbia River Gorge (the largest population is on WDFW's Sondino Ranch, west of Lyle, WA). For the past 10 years the USFS-CRGNSA has partnered with WDFW to improve habitat at Collins Ponds for these rare turtles.

To improve WPT nesting habitat, tall, thick grass areas around select ponds has been mown. Areas of invasive grass have been treated and replanted with native bunch grasses, which provide more interstitial space for nesting. Nearby oak woodlands have been thinned of encroaching fir that historically would have been controlled by natural fire. This provides WPTs access to move about in upland areas near the ponds. Fir trees have been directionally felled into these ponds to provide WPT basking habitat.



**Above:** Western Pond Turtles sunning on fir basking log.  
**Upper Right:** Mowed areas and native grasses around ponds.  
**Lower Right:** Oak woodlands thinned of encroaching firs.

# Deschutes National Forest

For 2017, the Deschutes National Forest accomplishment highlights include:

- Completed a Fish and Wildlife Wilderness Strategy for the Three Sisters Wilderness in collaboration with the Willamette NF, ODFW, and FWS.
- Closed 5 miles and decommissioned over 7 miles of road to increase core habitat.
- With partners, removed conifer encroachment in three meadows.
- 8.6 miles of fence removal .
- Completed 5.5 miles of fence markers, installed 20 escape ramps at water sources, and inventoried habitat for sage grouse in four allotments.
- Interagency and partner mosquito trapping project implemented to determine if West Nile Virus is having an effect on sage grouse.
- Partnered with RMEF to implement the Marsh Ecosystem Services thinning contract.
- Rebuilt three guzzlers damaged by heavy snow loading.
- Completed meadow restoration and road closures in the CFLRA.
- Partnered with OSU and NPS to establish a long-term monitoring site for pika.



**Above:** Sage grouse and pronghorn at water set – Bend Ft. Rock Ranger District. **Below:** Thinning at Big Marsh – Crescent Ranger District.



BY THE NUMBERS		
ACRES	FUND CODE	ACTIVITY
1,303	CMLG	Road closures
1,720	RTRT	Planting, prescribed fire
9,452	WFHF	Thinning, prescribed fire
2,358	CFLN	Road closures, meadow restoration
4,444	SSCC	Stewardship
2,694	NFVW	Invasive species treatment
1,761	NFWF	Habitat Enhancement
<b>23,732</b>	<b>TOTAL</b>	

## Program Highlight Bats and Caves

The Deschutes National Forest has over 550 caves and many of these receive high human use, especially Lava River Cave (a Show Cave) which sees over 60,000 visitors a summer. The high use poses a threat for white-nose syndrome (WNS) transmission.

2017 accomplishments related to bats and caves are:

- Conducted acoustic surveys at 15 caves, three bat grid cells, seven sites within the Indian Ford Meadow Restoration project, and three sites in the Green Ridge project.
- Inventoried 269 caves which included verifying the location, rating recreation use, potential for bat use, and how visible they were, measuring the distance to the nearest road, photo documentation and general notes.
- The cave crew patrolled back country caves educating the public on WNS and bats while picking up hundreds of pounds of garbage, recorded wildlife sightings at caves, and installed WNS and cave regulation signs. They also participated in WNS screening at Lava River Cave.
- In partnership with ODFW, we sampled/swabbed three winter hibernacula and four maternity sites for WNS.
- Conducted cave exit counts at four caves and mist-netted at six sites.
- In addition, we worked with several of our special use permit holders and resort owners on bats and buildings issues.
- Completion of the forest-wide cave management strategy and the Lava River Cave Management Plan.



**Above:** Cave inventory



**PARTNERS & COOPERATORS** Discover Your Forest, ODFW, East Cascades Audubon Society, RMEF, BLM, FWS, Oregon Eagle Foundation, High Desert Museum, OSU, NPS, OHA

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# Fremont–Winema National Forest

In 2017, the Fremont–Winema National Forest Wildlife Program completed several projects. Accomplishment highlights include:

- Thinned conifers within 1,130 acres of aspen and meadow habitat to improve riparian habitat.
- Thinned conifers and juniper within 580 acres to enhance mountain mahogany and shrub-steppe habitat.
- Thinned conifers to enhance 100 acres of ponderosa pine habitat.
- Thinned conifer and juniper within 25 acres of riparian habitat to improve a mule deer migration corridor.
- Partnered with 20 private landowners, OSU Extension, NRCS, ODF, and the Lake County Watershed Council to implement 2,500 acres on private land within the North Warner Multi-Ownership Forest Health Project area.
- Monitored for white-headed woodpeckers within the Crooked Mud Honey Project in partnership with the Rocky Mountain Research Station.
- Surveyed for western bumble bee at 41 locations across the forest.
- Surveyed for Northern spotted owl in the Lobert, Fort, Lake of the Woods, and Threemile Project Areas.
- Partnered with Klamath Bird Observatory to conduct landbird monitoring on the forest.

BY THE NUMBERS	
ACRES	FUND CODE
839	BDBD
4,177	CFLN
278	CWKV
4,922	GSRV
11,477	NFTM
398	NFXN
3,073	SRS2
2,735	WFHF
1,296	WFSU
<b>29,194</b>	<b>TOTAL</b>



Left: Aspen restoration - Chemult RD  
Right: Ponderosa pine restoration - Chemult RD



## Program Highlight Bumble Bee Surveys



Western bumblebee - Paisley RD

In 2015, 2016, and 2017, bumblebee surveys were conducted on the Fremont-Winema National Forest in south-central Oregon with western bumblebee (*Bombus occidentalis*) as the target species. The Fremont-Winema National Forest is within the East Cascades-Modoc Plateau Ecoregion and includes habitats from the moist mixed conifer of the eastern Cascade crest to high desert sage-steppe habitats, with a mix of everything in between. A wide variety of habitat types across a spectrum of elevations was surveyed, and many *Bombus* species were found.

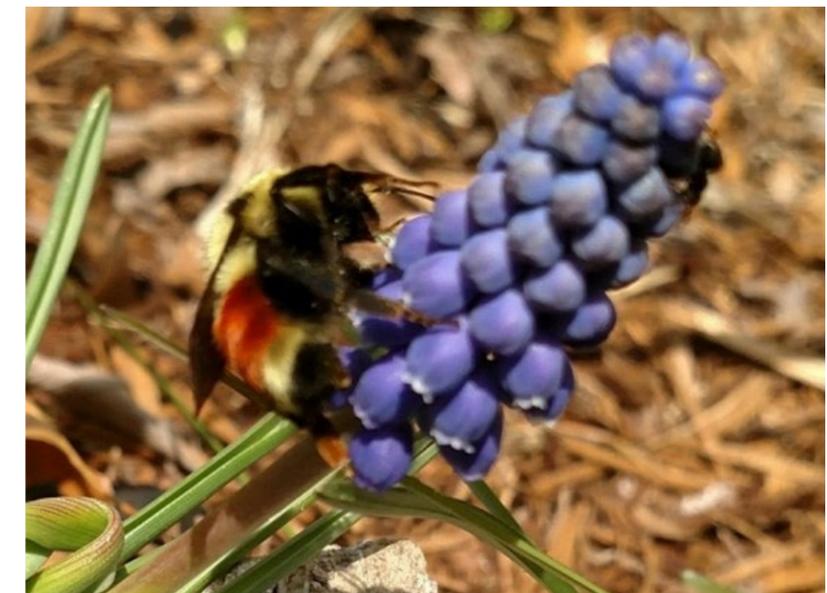
Survey efforts on the Fremont-Winema National Forest had two primary areas of focus. The first was to survey for western bumblebee at nine historic sites across the Forest documented in the NRIS Wildlife database between the years 1930 to 2009. Most of the historic records date back to the 1930's, with a few from the late 50's, one from the 90's, and three observations from the same location in 2007 – 2009.

The second focus for survey was to expand the search for western bumblebee outside of historic sites. After surveying several of these sites in 2015, only to find they often lacked floral resources to attract pollinators, we shifted our methods in 2016 and 2017 to follow the recommendation of Cameron et al. (2011) for locating sites opportunistically based on presence of floral resources.

Between survey efforts in 2015 and 2016, 36 sites were surveyed with bumblebees found at 26 sites. The most commonly encountered species were *B. vosnesenskii* and *B. bifarius*, occurring at 91 and 61 percent of sites respectively. Western bumblebee was not detected.

In 2017, 40 sites were surveyed with 15 species of bumblebees found. Bumblebees were found at all 40 sites. Western bumblebee documented specimens were collected at two locations: 1) Cold Springs on the Paisley Ranger District and 2) along the Sprague River on the Chiloquin Ranger District.

BY THE NUMBERS		
YEAR	FUND CODE	AMOUNT
2015	NFIM02	\$7,000
2016	NFIM02	\$7,000
2017	NFMP02	\$1,500
<b>TOTAL</b>		<b>\$15,500</b>



Hunt bumblebee queen - Lakeview RD

**PARTNERS & COOPERATORS** Klamath Bird Observatory, OR Department of Fish and Wildlife, US Fish and Wildlife Service, Oregon Hunter Association, Rocky Mountain Elk Foundation, Oregon State University Extension, Natural Resources Conservation Service, Northwest Youth Core, Lake County Resource Initiative, Chewaucan Biophysical Monitoring Group, Lake County Watershed Council, Warner Creek Correctional Facility, Oregon Department of Forestry.

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# Gifford Pinchot National Forest

In 2017, the Gifford Pinchot National Forest Wildlife Program completed several projects. Accomplishment highlights include:

- Supported NEPA process for a variety of district projects, Emergency Relief for Federally Owned Roads (ERFO) projects and large vegetation projects. Completed Biological evaluation and assessments for two large vegetation projects – Iron Crystal and Upper White Salmon.
- Coordinated with WDFW South Cascades Fisher Reintroduction project with coordination for potential release sites, tracking animals and, attending winter fisher releases and logistical support with fisher mortality retrieval.
- Conifer removal from 7a Meadow, Mardon Skipper Habitat Restoration, 15 acres, summer 2017.
- Complete KV wildlife habitat improvement and invasive treatments on the forest.
- Managed forest wildlife winter gate closure program for winter range protection.
- Maintained 41 wood duck boxes on the Cowlitz Valley Ranger District.
- Implemented three RMEF habitat improvement projects, treat invasive weeds in valuable elk winter range near Packwood and Mt. St. Helens National Volcanic Monument). Treated seven south zone meadows for invasive to maintain forage values for ungulates and mardon skippers and other pollinators.
- Completed 175 acres of young stand thinning with Puyallup Tribe grant to increase quality elk forage.
- Completed a draft invasive treatment strategy, survey for egg masses and 5 acres of invasive treatment at the Trout Creek Oregon spotted frog site. Thirty-five egg masses were found in FY17.
- Coordinated with the Cascade Carnivore project to continue the Cascade Red Fox camera work on the GP. Coordinated with Conservation Northwest on CVRD camera sites for potential wolverine and wolf presence.
- Conducted wintering bald eagle surveys and mardon skipper surveys. Assisted the Xerces Society with survey at Peterson Prairie permanent transects.
- Coordinated on the Mount St Helens Mt goat monitoring - 250 goats counted in 2017.
- Forest biologist is the Regional WA RMEF Liaison.

BY THE NUMBERS	
FUNDING SOURCE	AMOUNT
Base - NFWF	\$92,500
Oregon Spotted Frog	\$7,000
Mardon Skipper Habitat	\$25,000
ISSSSP	\$12,000
Puyallup Tribe	\$34,392
Title II Funds	\$11,000
RMEF	\$41,750
CCS - pollinators	\$3,500
<b>TOTAL</b>	<b>\$227,142</b>



Fisher being released

**PARTNERS & COOPERATORS** Rocky Mountain Elk Foundation, Cowlitz Tribe, Puyallup Tribe, Mount St Helens Institute, Washington Department of Fish and Wildlife, Conservation Northwest, Cascade Carnivore Project, Cascade Forest Conservancy, Lewis, Cowlitz, Skamania and Klickitat County Weed Boards

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## Program Highlight Invasive Species Treatment

Eight separate meadow systems located on the Gifford Pinchot National Forest totaling 575 acres were treated for invasive species to improve summer and winter feeding grounds for Rocky Mountain elk herds. Six of the eight meadow systems were treated in both 2015 and 2016 with RMEF funds as well. The primary target species were Canada thistle (*Cirsium arvense*), bull thistle (*Cirsium vulgare*), tansy ragwort (*Senecio jacobaea*), and houndstongue (*Cynoglossum officinale*). Knapweed species (*Centaurea sp.*), yellow toadflax (*Linaria vulgaris*), scotch broom (*Cytisus scoparius*) and hawkweed species (*Hieracium sp.*) were also treated where present.

The treatment of 66 acres in fields located at the Wind River Nursery for the past three years have yielded excellent, positive results.

Monitoring indicates a significant reduction of the Canada thistle infestation recorded in 2015. Calculations of herbicide records reveal a more than 75% reduction in the amount used between 2016 and 2017.

The 63-acre young conifer thinning area known as Dice, treated for Canada thistle and tansy ragwort, showed an improvement of 33% between 2016 and 2017. The 40-acre conifer thinning area known as Puppy yielded a 33% reduction between 2015 and 2016, but because of perfect conditions germinating the seedbank, a slight increase occurred for herbicide used in 2017 compared to the year before.



Large tansy ragwort patch; crew cut and bagged flowers and sprayed rosettes  
Skookum meadow, July 2017



Crew heading out to tackle weeds such as Canada thistle and tansy ragwort  
Skookum meadow, July 2017

Other areas treated for several years prior to three consecutive years with RMEF funds continue to show improvement. The reduction of invasive species in the main areas has allowed for an increased number of acres protected for wildlife habitat and the reduction of vector sources contributing to infestations in priority areas.

# Malheur National Forest

In 2017, the Malheur National Forest Wildlife Program completed several projects. Accomplishment highlights include:

- Specialist reports completed for one EIS and two EA projects addressing 108,984 acres of restoration planning.
- Continued volunteer workdays in cooperation with OHA and the RMEF regional rendezvous.
- 11 USFS personnel participated in Free Fishing day at McHaley pond in cooperation with the Warm Springs tribal personnel
- Assisted ODFW with bighorn sheep surveys.
- Continued mule deer habitat work funded by ODFW through the mule deer initiative (MDI) program.
- Initiated a good neighbor agreement with ODFW for aspen restoration.
- Assisted botany personnel in locating, enhancing and propagating native milkweed to benefit monarch butterflies.
- Continued bald and golden eagle nest monitoring.
- Set up proposed elk security areas in cooperation with ODFW for forest plan revision
- Continued post-burn cavity excavator research project in partnership with Rocky Mtn. Research Station.
- Constructed 252 berms for road closures.

BY THE NUMBERS		
ACRES	FUND CODE	ACTIVITY
2,972	NFWF	Juniper removal, fence removal, thinning, meadow enhancement
1,562	CFLN	Aspen enhancement, cavity excavator research
1,476	NFXN	Mule deer initiative habitat improvement
<b>6,010</b>	<b>TOTAL</b>	



**Above:** Buck & pole fence construction – RMEF Rendezvous, Prairie City Ranger District.  
**Left:** Bobcat in the Austin project area, Blue Mountain Ranger District.



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## Program Highlight Damon Aspen Project

In the winter of 2017, a new partnership was established with ODFW using a good neighbor agreement for aspen restoration activities on the Malheur. This agreement will allow State wildlife personnel to administer a contract on the Malheur for restoration purposes that will benefit both agencies.

Successful regeneration and expansion of aspen stands can occur when stands receive enough light and protection from over browsing, especially with new seedlings. Felling conifers can reduce competition and open up the canopy allowing additional sunlight to stimulate new growth of aspens. Protecting new seedlings with fencing or by hinging conifers can reduce browsing.

This project is located on the outskirts of Bear Valley near Seneca, Oregon.

168 acres of aspen will be restored through hinging conifer trees, a technique which leaves the tree attached to the stump to create a natural barrier to protect aspen from browsing.

**Above:** Aspen stand in the Damon aspen project area. All of the small and medium sized conifers will be felled near the aspen to open up the canopy and allow more room for the aspen stand to grow and expand. **Below:** Hinged tree used to reduce access to aspens by both wild and domestic ungulates.



# Mt. Baker-Snoqualmie National Forest

In 2017 the Mt. Baker-Snoqualmie National Forest successfully improved wildlife habitat and provided wildlife information to the public. Accomplishment highlights include:

- Commercially thinned 65 acres in collaboration with the Darrington Collaborative.
- Pre-commercially thinned 124 acres.
- Installed one bat friendly mine closure.
- Increased grizzly core and wolf security habitat by 65 acres with road decommissioning.
- Wildlife information shared with over 11,000 individuals at public events: Woodland Park Zoo Bear Affair, Skagit River Salmon Festival, Stillaguamish Festival of the River, and Issaquah Salmon Days.
- Habitat improvement from wildfire – 7,834 acres.
- Darrington Science, Technology, Engineering and Math (STEM) program – curriculum developed with middle school students.
- Cooperated with National Park Service and US Fish and Wildlife Service on North Cascades Ecosystem Grizzly Recovery Plan/EIS.
- Cooperated with National Park Service and Washington Department of Wildlife on the Mountain Goat Management Plan/EIS for Olympic National Park.



**Above:** Installation of a beaver deceiver with Stillaguamish and Sauk-Suiattle Tribal staff during middle school students outdoor education days.  
**Below:** Mountain Goat in Olympic National Park.



BY THE NUMBERS		
ACRES	FUND CODE	ACTIVITY
65	NFTM	Commercial thinning
124	RTRT	Pre-commercial thinning
65	CMLG	Road decommissioning
2,000	NFMG	Bat-friendly mine closure
7,834	WFSU	Wildfire
<b>10,088</b>	<b>TOTAL</b>	

**PARTNERS & COOPERATORS** Darrington Collaborative, Woodland Park Zoo, Stillaguamish Tribe of Indians, Swinomish Tribal Community, Snoqualmie Indian Tribe, Sauk-Suiattle Indian Tribe, Skagit River System Cooperative, Skagit Fisheries Enhancement Group

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## Program Highlight Snoqualmie Point Park

The REI Loyalty Strategy Team took a day out of the office and came outside to join us in getting dirty and giving back to our public lands in early October. The REI volunteers joined the National Forest Foundation in an event hosted by Mountains to Sound Greenway Trust and the U.S. Forest Service to plant a pollinator garden on the portion of Snoqualmie Point Park on the Mount Baker-Snoqualmie National Forest. Volunteers worked a collective 175 hours to plant more than 200 shrubs and bushes and move over 50 yards of mulch to create habitat to help support important pollinators, such as bees, whose populations are in decline.



Snoqualmie Point Park provides a panoramic, easily accessible view of the Snoqualmie Valley, Mount Si, and the Cascade Mountain Range north to Mount Baker. The 8-acre Snoqualmie Point Park site was acquired in 2000 through the cooperative efforts of the Trust for Public Lands, the U.S. Forest Service, and the City of Snoqualmie, with assistance from the Mountains to Sound Greenway Trust.

Work will continue in 2018 as the National Environmental Education and Training Foundation chose Mountains to Sound Greenway Trust ("Grantee") as a recipient of a U.S. Forest Service National Public Lands Day Pollinator and Community Garden Grant in the amount of \$3,000.00. The Grant Period for this grant begins on September 30, 2017 and ends on May 18, 2018.



Specifically, funds will be used to partner with the Mt. Baker-Snoqualmie National Forest, the Student Conservation Association, and the City of Snoqualmie to create a pollinator garden at Snoqualmie Point Park. The project will provide an opportunity to educate the public on the benefits of native pollinator plants.

This project was led by Aly Flisek, AmeriCorps Intern.

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# Mt. Hood National Forest

In 2017 wildlife biologists for the Mt. Hood National Forest continued to focus on integrated habitat improvement by working on forest interdisciplinary teams across all districts. Wildlife surveys were completed on a large number of sites and project areas. Also completed were wildlife enhancement projects such as snag and downed wood creation, big game mineral block placements, and maintenance of guzzlers and nest boxes. Accomplishment highlights include:



**Left:** Hawkwatch program at Bonnie Butte. **Below:** White-nose syndrome survey in Kiggins Mine.



- Contributed to landscape level wildlife planning for the North Clackamas Integrated Resource Project on the Clackamas River Ranger District. Wildlife related activities planned include variable density thinning, forage creation and enhancement, Northern spotted owl habitat enhancement, snag and down wood creation, aquatic habitat restoration, and beaver restoration across 24,832 acres, primarily within the North Fork Clackamas River watershed.
- Participated in surveys for white-nose syndrome in cooperation with Bat Conservation International (BCI) and ODFW.
- Continued 23 year partnership with Hawkwatch International at Bonnie Butte to record hawk migration movements; including a pilot Hawkfest event at Government Camp.
- In partnership with Cascadia Wild, continued surveys (camera and snow tracking) for rare carnivore species including Sierra Nevada red fox and wolverine.
- Surveys continued from previous years for Northern spotted owl in the Polallie Cooper Fuels Reduction and Crystal Clear Restoration project areas.
- Presented several wildlife themed education programs in the David Douglas School District in southeast Portland.

BY THE NUMBERS		
ACRES	FUND CODE	ACTIVITY
637	SSCC & KV	Snags, downed wood
5,250	SSCC & CMRD	Road decommissioning and closing
1,759	NFWF	Guzzlers, nest boxes, mineral blocks, etc.
1,954	NFWW & SSCC	Invasive plant control
<b>9,600</b>	<b>TOTAL</b>	

**PARTNERS & COOPERATORS** Hawkwatch International, Cascadia Wild, Oregon Hunters Association, PGE, Clackamas Stewardship Partners, ODFW, Portland Water Bureau, National Forest Foundation, David Douglas School District

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## Program Highlight Crystal Clear Restoration Planning Area

The CCR Planning Area is an Integrated Resource planning area on the Barlow and Hood River Ranger Districts and is comprised of a large portion of the White River Watershed. The Landscape level restoration project includes 2,800 acres of White River LSR and 99% is in Critical Habitat for the Northern spotted owl with eight potential NSO territories.

Wildlife related activities include:

- 420 acres of LSR Variable Density Thinning to lower the risk of potential loss of NSO habitat to large scale disturbance.
- 2,160 acres of Forage Creation and Enhancement – creation of early seral habitat within Deer & Elk summer range and winter range.
- 6,500 acres of thinning in 80-180 year old fire originated stands for NSO suitable, foraging, and dispersal habitat protection.
- 600 acres of thinning in Pine Oak habitat for restoration and protection of pine/oak ecosystem east of the Cascades.
- Road Management
- Aquatic Habitat Restoration



# Ochoco National Forest

The Ochoco National Forest wildlife program is highly integrated among resource areas and as a result continues to foster relationships with a diverse group of partners and volunteers that create a highly successful program. In fiscal year 2017, the Ochoco National Forest accomplished 14,941 acres of terrestrial wildlife habitat enhancement. The following summary exemplifies the diverse work of the wildlife program.

- **Maury Mule Deer Initiative** – The Maury Mule Deer Initiative planning began in 2009. It has been a successful partnership between the USFS and ODFW. This partnership has leveraged outside dollars from its inception and continues to improve mule deer habitat across the Maury Mountains. In 2017, ODFW and the Ochoco NF installed four gates to improve winter range habitat for big game.
- **Restoring Habitat through Diverse Partnerships – Old Dry Creek:** The purpose of this project was to remove invasive juniper, to improve plant diversity and wildlife habitat across 600 acres. The project leveraged partner dollars from RMEF, BMEI, OHA and as a result was successful in securing Challenge Cost Share funding, making the project whole.
- **McKay Prescribed Burn** – Ponderosa pine restoration continues to be a priority within the dry eastside forests. The McKay Project uses prescribed natural fire as a tool to thin fire intolerant species, reducing the risk of losing legacy ponderosa pine to stand replacing fire and improving wildlife habitat. Funding was secured through RMEF to complete the project.
- **Rimrock Spring Wildlife Management Area** – The 400-acre WMA is a long-term cooperative agreement between ODFW and the Crooked River National Grassland. The area provides valuable riparian/wetland habitat within the sage steppe ecosystem and wildlife viewing access to the public. Through a cooperative effort, encroaching juniper were cut and hand piled, native plant seed for pollinator was purchased and planted, and plants specific to pollinators were protected.
- **Community Engagement Conservation Education** – Prineville OHA believes it is necessary to invest early in wildlife conservation, to the extent that OHA sponsored a Forest Service internship. The internship was opened to students interested in seeking wildlife sciences as a career. This partnership between OHA and the Forest Service allowed the Ochoco NF to provide an intern the experience of wildlife fieldwork on a day-to-day basis and assisted with the completion of wildlife surveys and monitoring.
- **Volunteers (OHA Receives National Award)** – Due to the sheer volume of projects Bend OHA completes on the Ochoco NF, they were the recipient of the Annual Volunteer and Restoration Service Award from the Washington Office. Their invaluable partnership annually improves and restores hundreds of acres of habitat on the Ochoco NF. This field season OHA maintained nine guzzlers, installed four escape ramps in water troughs, maintained 11 exclosures.



**Above Left:** Gate installation to improve mule deer winter habitat. **Above Right:** OHA guzzler volunteers.

BY THE NUMBERS	
ACRES	ACTIVITY
178	Fence removal
5,280	Non-commercial thinning
1,773	Commercial thinning
5,000	Prescribed fire
4,177	Road closure, decommissioning
40	Wildlife escape ramps
266	Vent caps
<b>14,941</b>	<b>TOTAL</b>



**Above Left:** OHA/FS intern Bailey Michel conducts goshawk monitoring. **Above Right:** OHA volunteers work on fence maintenance.

## Program Highlight Old Dry Creek Restoration Project

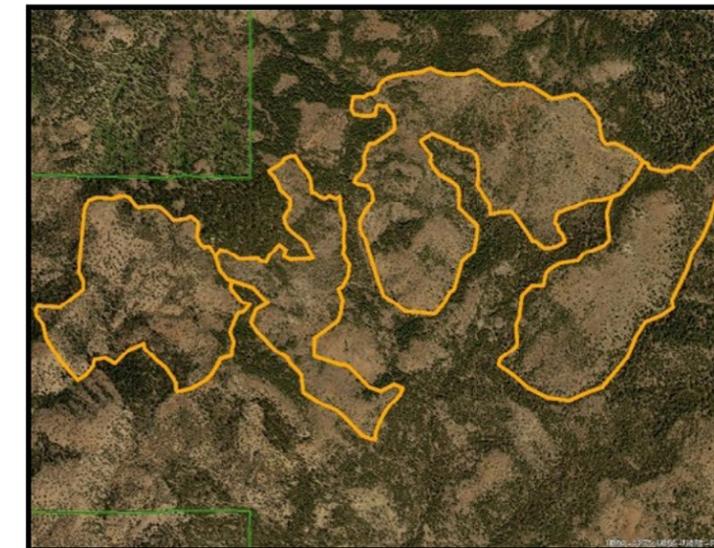
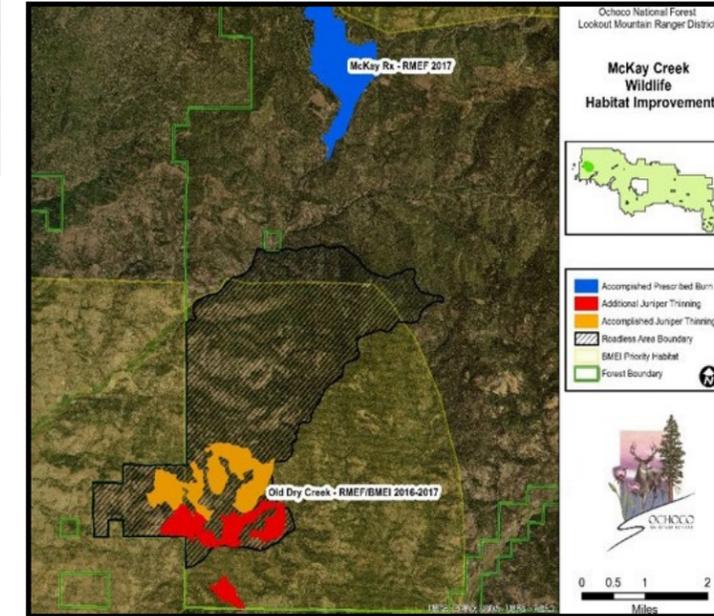


Landscape Scale Restoration, as it relates to creating resilient forests and habitat is a high priority for the Ochoco NF. Projects are developed and implemented through a highly integrated approach involving all resource specialist. As a result, the Ochoco NF produces highly competitive projects for both internal and external funding sources.

Old Dry Creek Restoration Project:

- Rocky Mountain Elk Foundation - \$20,000
- Blue Mountain Elk Initiative - \$18,400
- Oregon Hunters Association - \$2,500
- R6 Challenge Cost Share - \$30,000
- Youth Conservation Corp - \$6,000
- Central Oregon Intergovernmental Council – Youth Crew \$6,000

This is a multi-phase project enhancing approximately 2,000 acres of elk and mule deer winter range, improving water availability for wildlife, and encouraging elk redistribution from private lands to public lands within the Green Mountain Roadless Area. The project enhances seeps and springs through the construction of exclosures and installation of new livestock water developments in the area while also removing existing stands of western juniper and reducing juniper competition among the ponderosa pine forest. Overall, the project decreases the risk of stand replacing fire the area, while improving, grass, forb and shrub production in critical winter range habitat for big game. The project not only benefits the ungulate community, but restores habitat for ponderosa pine obligates, for species like the white-headed woodpecker and pygmy nuthatch.



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# Okanogan–Wenatchee National Forest

In 2017, the Okanogan–Wenatchee National Forest completed several projects. Accomplishment highlights include:

- Reintroduced beavers that established dams at Hooker, Rainy, Middle Fork Beaver, Swaram, Crater, Mission, and South 20 Mile Creek
- Collaborated on amphibian and small mammal connectivity research with Central Washington University
- Launched I-90 Wildlife Watch Program on Facebook
- Over 200,000 acres burned in wildfires, biologists worked with fire teams to minimize damage and maximize opportunities for beneficial fire effects
- Made presentations to over 32,000 families, students, public at:
  - Antioch Univ. Seattle, Bonaparte
  - Lake Fishing Day Boulder Cave,
  - Chelan Ridge, Pateros Hawk Fest,
  - Cle Elum Kiwanis, CWU, Int.
- Committee on Ecology & Transportation, Urban Environmental Ed. Program, Yakima & Kittitas Co. Retired School Dist. Assoc., Methow Conservancy, NCI Citizen Science Spring Snake Count, FS Carnivore Class in Yellowstone, Winthrop Library, and WDFW Hunter Safety



• Monitoring Habitats and Populations:

- Spotted owl- 303,600 acres
- Surveyed, five pairs successfully reproduced with several other pair located but no reproduction detected
- Bats- tested highest known bat population sites for P. destructans w/ WDFW (all sites were negative); documented 1,600+ individuals exiting a maternity
- Roost & collected echolocation data at several locations
- Barred owls- surveyed 250,000 acres, reduced population levels on 29,520 acres
- Peregrine falcon- monitored 8 eyries, documented four fledglings produced, and managed three area closures
- Bald Eagle- monitored four territories; 1 fledgling
- Mardon Skipper- completed 4th yr. of monitoring study
- Goshawk- surveyed four historic nests
- Great grey owls- surveyed 1,300 acres; 1 new nest; 2 fledgling.
- Breeding Birds- surveyed 24.5 miles



BY THE NUMBERS		
ACRES	FUND CODE	ACTIVITY
2,535	WFHF	Prescribed fire
1,983	WFHF, CFLN, RTRT, SPFH, PTNR, NFWW	Thinning
29,525	NFIM, PTNR	Non-native removal
2,073	NFWF, NFXN, CMRD	Road decommissioning
1,932	NFWF, PTNR, NFRW	Beaver reintroduction, shrub planting, vault caps
2,470	NFWF, PTNR	Owl nest platforms
56,624	WFSU	Natural wildfire
<b>97,142</b>	<b>TOTAL</b>	

**PARTNERS & COOPERATORS** Access Fund, American Legion Post 82 & 84, Audubon Society, Bonneville Env. Found., BOR, Chelan Co., Chelan-Douglas Land Trust, City of Leavenworth & Pateros, Confederated Tribes – Colville, Conservation NW, Curlew Job Corps, Hawkwatch Int., Home Depot, I-90 Wildlife Watch, Methow Conservancy, Methow Salmon Rec., Mtns. To Sound Greenway Trust, NFWF, N Cascades Inst., Okanogan Sherriff & Highlands Alliance, Orville Sportsmen Club, Seattle City Light, TNC, Univ. of BC, C-WA, ID, & WA, Upper Basin Birders, USFWS, WA Climbers Coalition, WA Cons. Science Inst., WA NR depts., WA River Inst., Wildlife Conservation Soc., WSU, Xerces, Yakama Nation

**CONTACTS** Monte Kuk: 509-664-9320, mkuk@fs.fed.us

## Program Highlight Carnivore Survey

### Western State Wolverine Survey Project:

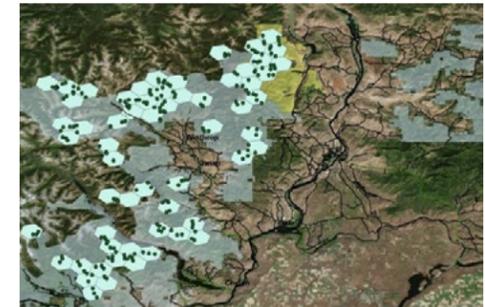
Biologists worked with WDFW, researchers, and the USFWS to implement a multi state survey effort throughout four Northwestern states. Biologists installed and monitored numerous baited camera stations across the forest.

- Biologists also continued survey efforts with volunteers and staff from Conservation Northwest as part of the 10 year North Cascade wolverine study.
- In total close to 30 remote baited camera stations were monitored.
- Detections were made at six different sites.
- Documented only the 3rd wolverine den ever detected in the state of Washington.
- Survey and detection data will be used to help the USFWS make a listing determination.



### WSU Large Scale Lynx Detection and Distribution Study

Biologists assisted researchers from WSU with identifying potential survey locations and routes, and installed a small portion of the almost 200 cameras deployed on the forest.



### Other Survey Efforts

- Cooperated in a research effort on Cascade red fox for the 2nd consecutive year that detected 15 individuals.
- Collaborating with WSDOT on camera monitoring in wildlife crossing structures.
- Continued bear hair coral survey effort for grizzly bear in the Pasayten Wilderness.
- Continued collaborative research on marten with PNW research, Woodland Park Zoo, and WSDOT.



# Olympic National Forest

Highlights of the Olympic National Forest (ONF) in 2017 that benefited wildlife include:



**Far Left:** Western bumblebee training session with FS, WDFW, and Xerces Society. **Left:** Presentation to The Wild Society, an outdoor education non-profit, on pollinators and animal tracking before their multi-day backcountry trip.

- Collaborated with Xerces Society and ISSSSP program for the first bumblebee training on the Forest. Surveys resulting in nine species detected at 15 sites.
- Continued recovery actions for Taylor’s checkerspot butterfly including population monitoring and habitat enhancement (see program highlight).
- Participated with WDFW white-nose syndrome coordinator to monitor administrative sites on the Forest; WNS was not detected.
- Initiated surveys with Woodland Park Zoo for Pacific marten using long-term lure dispensers at four sites on ONF and two on Olympic National Park.
- Partnered with native plant program to plant 2000+ early seral pollinator plugs at Dennie Ahl Seed Orchard and five acres in Dungeness watershed.
- Served as cooperative agency with WDFW and NPS during NEPA planning for mountain goat management plan/DEIS. Continued with annual mountain goat public outreach during peak recreation season.
- Continued snag and coarse wood creation in commercially-thinned stands. Created 405 snags by girdling and topping.
- Developed and presented environment education programs for students, families, and conservation groups events highlighting pollinators and carnivores on Olympic Peninsula.
- Administered annual bald eagle nest survey contract at 11 sites resulting in two eaglets observed at two nests.
- Continued work with WDFW, Eyes in the Woods, and Rocky Mountain Elk Foundation to improve elk forage habitat.

BY THE NUMBERS		
ACRES	FUND CODE	ACTIVITY
1,373	NFTM	Commercial thinning
391	RTRT	Pre-commercial thinning
970	NFVW	Invasive plant treatment
114	NFWF, NFXN, PTNF	Taylor’s checkerspot and pollinator habitat enhancement, elk forage enhancement, native planting
932	CMLG	Road decommissioning
450	CWKV	Snag, downed wood
<b>4,230</b>	<b>TOTAL</b>	

## Program Highlight Butterfly Habitat Enhancement

The Olympic National Forest improved habitat for the endangered Taylor’s checkerspot butterfly and other species associated with open dry meadows and balds in the Dungeness watershed. The work included removing encroaching woody vegetation in small openings, and applying native seed and plugs at the sites. In addition, slash from the vegetation was piled and some trees were girdled, secondarily benefiting wildlife associated with dead & down wood.

Sea Blush (*Plectritis congesta*) and Blue-eyed Mary (*Collinsia parviflora*) seed was spread at two sites and paintbrush (*Castilleja hispida*) plugs planted at one site. The seeding and planting was done by a volunteers, WCC crew, and Olympic National Forest, and WDFW biologists.

Partners included Washington Department of Fish and Wildlife, US Fish and Wildlife Service, Center for Natural Lands Management, Washington Conservation Corps, and Student Conservation Association.

The forest participated in two educational events about this project: (1) a presentation entitled “Butterflies and other Pollinators” in five middle school classes and (2) a display about pollinators at the Dungeness River Festival.



**Above:** Local citizen volunteers getting ready to plant butterfly host plants. **Left:** Volunteers working hard planting harsh paintbrush plugs.



**Far Right:** WDFW biologist with locally sourced Blue-eyed Mary and Sea Blush seed. **Right:** Washington Conservation Corps, FS and WDFW wildlife biologists having a pre-work meeting before restoration work.



**PARTNERS & COOPERATORS** U.S. Fish & Wildlife Service, Washington Department of Fish & Wildlife, Rocky Mountain Elk Foundation, Eyes in the Woods, The Mountaineers, Olympic National Park, U.S. Geological Survey, Oregon State University, PNW Research Station, Washington Conservation Corps, Xerces Society, Student Conservation Association, Woodland Park Zoo

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# Rogue River-Siskiyou National Forest

In 2017, the Rogue River Siskiyou National Forest accomplished T,E, and S, and MIS species inventories, as well as habitat improvement work across the Forest with our many internal and external partners. Our focus in the terrestrial wildlife program continues to be maintenance and restoration of both early and late seral habitats, as well as the conservation and recovery of listed and sensitive species that occur on the Forest. We are also involved in three large NEPA projects. Accomplishment highlights include:



Small mammals were spotted at fire camp begging for food.

- Over 19,000 acres of wildlife habitat enhanced using both appropriated monies as well as successfully integrating with other resources, in particular fire and fuels resources. A large portion of the Forest's target also came from the installation of bat gates across the Forest which has proven to be an effective mitigation measure for loss of natural roosting habitat.
- A multi-Forest seed collection effort continues early seral pollinators including bumblebees and butterflies such as the Monarch butterfly and Mardon Skipper. Seed stock will be grown at the local USFS nursery and used for outplanting for various pollinator species. The Wild River RD also received a 50,000 Grant to propagate both milkweed and Monarch butterflies for outplanting and release.
- The Forest continues a fisher and small mammal monitoring effort with PSW/PNW, the Nature Conservancy, and the City of Ashland to study the response of fisher and their prey species to fuels reduction activities in the Ashland Watershed. To date, 40 fisher have been captured, 18 dens have been located, 10 in hardwoods. This will be our last year of trapping and an MS student from Utah State is writing up the results. From July through November we have had large fires, totaling 300,000 acres and all biologists work those fires as Resource Advisors for multiple tours

BY THE NUMBERS		
ACRES	FUND CODE	ACTIVITY
1,233	KV	Cavity creation
715	NFVW	Invasive species management
591	NFWF	Pipe cap placement
26	KV	Meadow restoration
5,036	NFMG	Bat cave protection
616	NFWF	Native plant restoration
64	NFWF/NFIM	Pollinator habitat
397	WFHF	Prescribed fire
1,652	NFTM	Thinning
5,169	WFSU	Wildfire natural
4,426	NFTM	Habitat enhancement, road decommissioning
<b>19,925</b>	<b>TOTAL</b>	



Annual Bat Monitoring

## Program Highlight Fuels Reduction, Deer and Elk Forage Improvement

In 2017 the Forest continued on a pine/ oak thinning for fuels reduction and deer and elk forage improvement project on the High Cascades Ranger District in critical big game winter range – we accomplished over 1600 acres this year on ground that was largely nonnative off site pine and other native conifers that were encroaching remnant oaks and large pine. Our game cameras showed a relatively quick response and increase in ungulate use. This is just a part of a 6,500 acre project area that will continue over the next two to three years.



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**PARTNERS & COOPERATORS** USFS, OR Hunter's Association, Klamath Bird Observatory, OR Dept. of Fish and Wildlife, Rocky Mtn. Elk Foundation, Mule Deer Foundation, JH Stone Nursery, Xerces Society, Southern Oregon University, Oregon State University, Pacific SW Research Station, The Nature Conservancy, City of Ashland. Pacific Northwest Research Station.

**CONTACTS** David Clayton: 541-618-2054, dclayton@fs.fed.us

# Siuslaw National Forest

In 2017, the Siuslaw National Forest successfully completed and implemented our forest thinning and restoration program with no objections or litigation. Accomplishment highlights include:

- Established monitoring program of deadwood creation and started creating cavity starts and bat flanges in addition to snag creation.
- Trained and certified two wildlife biologists for tree climbing and Red Tree Vole surveys. This allows us to be more responsive while reducing our overall costs.
- Created 10 acres of new western snowy plover habitat.
- Removed 76 acres of the invasive European beachgrass.
- 16 miles of fencing protecting beach nesting areas were installed and removed.
- Five volunteer docents logged 1,894 hours and contacting over 8,700 visitors to share wildlife conservation messages.
- Outreach at the Portland Zoo resulted in over 3000 contacts connecting conservation in zoos to wildlands.
- Coordinated volunteer effort to remove 985 lbs. of beach debris.



**Above:** Tree climbing for Red Tree Voles. **Left:** Environment for the Americas Intern Jasmine Buries gives a presentation on pollinators and the Oregon Silverspot Butterflies that are raised at the Portland Zoo and released back into the wild on the Siuslaw.

BY THE NUMBERS		
ACRES	FUND CODE	ACTIVITY
1,152	CWKV	Snag creation
855	SSCC	Habitat improvement
2,338	NFTM	Thinning
2,776	NFWF	Habitat improvement
167	NFVW	Invasive species removal
2,246	Other	Partnerships/integrated
<b>9,534</b>	<b>TOTAL</b>	

## Program Highlight Coastal Meadow Restoration



Oregon silverspot butterfly finding suitable open egg laying habitat amongst the dense vegetation.

The Siuslaw National Forest is working with multiple partners to identify key habitat requirements for sensitive meadow dependent species, primarily the federally listed Oregon Silverspot butterfly. Last fall, we mowed experimental strips in the Rock Creek meadows in an adaptive management approach to monitor the effects on encroaching vegetation. In the spring, we collaborated with the Institute of Applied Ecology and the Coffee Creek and Shutter Creek inmate crews in the cultivation and planting of 10,000 violets and 10,000 nectar plants (Pearly Everlasting, Goldenrod, and Aster).

Later this spring, we mapped the distribution and abundance of naturally occurring violets in the meadows, finding high concentrations strongly associated with our managed areas where grasses and shrubs had been mowed. This summer, we initiated a study design, observing and documenting butterfly ovipositioning behavior. The butterflies oviposited in our mowed areas and violet beds while avoiding unmowed sections.

Additional management activities included hand removal of invasive weeds and violet bed maintenance. Each of these accomplishments gradually brings us closer to a more diverse and resilient landscape, restoring wildlife and pollinator interactions in marine terrace communities. As we continue to learn from results, we will further develop integrated management plans, making adjustments as required.



**Above:** Another appreciative visitor to our maintained meadows. **Left:** Mowed strips among the salal trying to expose openings.



**PARTNERS & COOPERATORS** Oregon Hunters Association, PNW Research Station, Rocky Mountain Elk Foundation, Portland Zoo, Environment for the Americas, International Programs

**CONTACTS** Deanna Williams: 541-750-7013, deannawilliams@fs.fed.us

# Umatilla National Forest

In 2017, the Umatilla National Forest successfully completed and implemented its wildlife program as part of an integrated effort. Accomplishment highlights include:

- Enhanced habitat for big game forage and other wildlife on 900 acres through prescribed fire.
- Improved wildlife habitat by treating approximately 6,700 acres of invasive plants.
- Improved 6,200 acres of wildlife habitat through thinning and hazardous fuels reduction.
- Implemented 22 miles of road closures that improved 6,800 acres of habitat/ elk security.
- Built fence around 1 acre of aspen.
- Removed 0.5 miles of fence to improve movement for wildlife.
- Installed 24 toilet vent screens.
- American marten monitoring (four camera traps).
- White-headed and Lewis's woodpecker monitoring in Rx burn units (both species detected!).
- Six Golden eagle nests monitored on Grande Ronde River .
- Assisted ODFW with wolf monitoring.
- Assisted WDFW with bighorn sheep capture.



**Above:** Looking for wolf sign, North Fork John Day RD. **Left:** American marten visiting a camera trap, Walla Walla RD. **Below:** Wolf on remote sensing camera, North Fork John Day RD



BY THE NUMBERS		
ACRES	FUND CODE	ACTIVITY
900	WFHF	Prescribed fire
6,700	KV, NFWW	Invasive plant treatment
6,200	Integrated	Thinning
6,800	WFHF	Road closure
1	Partner	Aspen fence
90	NFWF	Fence removal
950	NFWF	Vent screens
200	WFSU	Wildfire
<b>21,900</b>	<b>TOTAL</b>	

## Program Highlight Veterans Working For Wildlife

The Umatilla Veteran Crew is a 23 person crew comprised of military veterans who work toward accomplishing targeted thinning and restoration work.

The goals of the Vet Crew program are to capitalize on skills learned by veterans during their military service, recruit employees from the most culturally diverse workforce in the U.S. - the U.S. military, provide a bridge into the civilian workforce for veterans, and introduce veterans to careers in Fire and Fuels Management and other areas of natural resources.

“Vets working for wildlife” Challenge Cost Share project improved wildlife habitat and forest resiliency on the North Fork John Day Ranger District of the Umatilla National Forest, primarily in the Wilkins project area and along the Blue Mountain Scenic Byway (53 road).

The Wilkins Project plans to restore 6,000 acres of dry upland forest conditions and encourage growth of large diameter trees in hopes to move the area towards old forest single stratum.

The projects the Vet Crew work on will improve big game forage and promote habitat for open forest species such as white-headed woodpeckers

In 2017, the Vet Crew completed 52 acres of thinning that will benefit wildlife and more of this work is to come in 2018!



**PARTNERS & COOPERATORS** ODFW, WDFW, Confederated Tribes of the Umatilla Indian Reservation, USFWS, Rocky Mountain Elk Foundation, Blue Mountains Elk Initiative, Oregon Eagle Foundation

**CONTACTS** Lizzy Berkley: 541-278-3814, elizabethberkley@fs.fed.us

# Umpqua National Forest

In 2017 the Umpqua National Forest successfully completed and implemented the following accomplishments, highlights include:

- Along with partners and volunteers, monitored northern spotted owls, peregrine falcons, bats, carnivores, red tree voles, western bumblebees, western pond turtles, other wildlife species of interest.
- Installed 3 bat friendly gates at mine shaft closures on the Cottage Grove Ranger District.
- Completed 829 acres of snag creation.
- Creating or restored 38 acres of meadow.
- Openings through thinning and/or burning for elk and deer forage improvement.
- Assisted Corvallis Research Station installing Acoustic Recording Units for northern spotted owl.
- With RMEF, OHA, MDF and NWTF, completed 26,600 acres of elk, deer and other wildlife enhancement by road closures, habitat openings and forage improvement treatments.

BY THE NUMBERS		
ACRES	FUND CODE	ACTIVITY
889	CWKV	Snag creation, forage creation
6,000	NFMG	Bat closure (Gates Mine)
32	NFXN	Meadow restoration
26,560	NFWF	Winter range gate closure
<b>33,481</b>	<b>TOTAL</b>	



Above: Fisher captured in partnership with ODFW. Left: Mine Closure on Cottage Grove Ranger District.

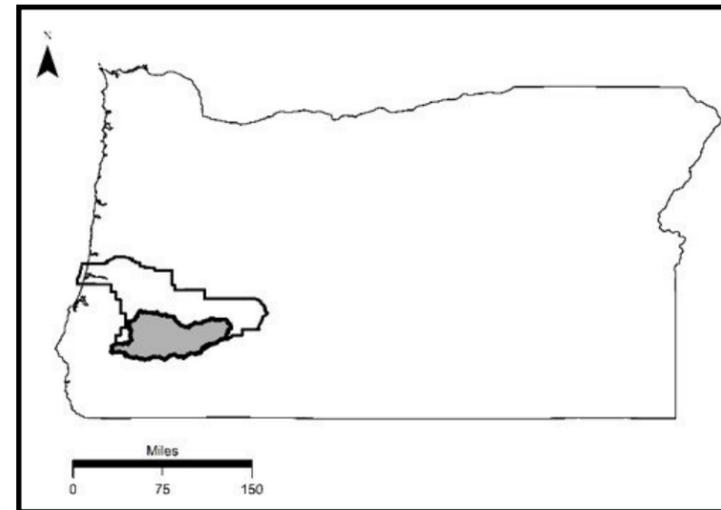


## Program Highlight Western Pond Turtle Monitoring: Distribution and Abundance in the South Umpqua After 15 Years

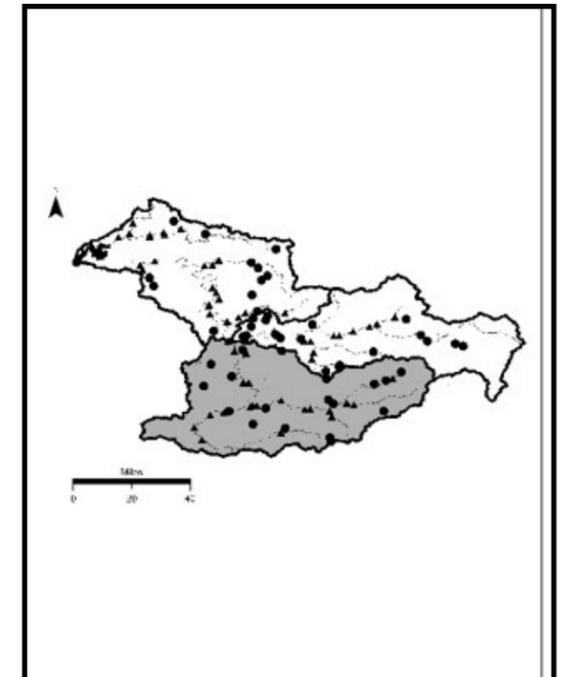


In 2017, in coordination with the BLM, USFS and the Oregon Wildlife Institute, western pond turtle surveys were conducted on federal and private land. The surveys replicated a study from 15 years ago. Thirty-eight river and pond sites within the South Umpqua sub-basin that were surveyed previously (Horn 2001) and from the same observation points. Protocols matched those followed in 1999-2000 to allow direct comparison of the data. The data will be used to estimate occupancy and abundance as was done previously (Horn and Gervais in review). Results will be compared to those found for the data collected at these same sites in 1999-2000.

Data collection is complete with data analysis to occur in coming months. By repeating these surveys and evaluating changes in this core area may better inform conservation at both the range-wide and regional level.



Above: Study region within Oregon. Highlighted area shows the South Umpqua Basin within Douglas County. Left: Survey sites along rivers and at ponds within the Umpqua Basin that were originally sampled during 1999-2000. Triangles represent river sites, ponds are represented by circles. 2017 surveys were conducted at the South Umpqua Basin sites, within the shaded area.



**PARTNERS & COOPERATORS** ODFW, RMEF, Oregon Hunters Association, National Wild Turkey Federation, U.S. Fish and Wildlife Service, Bureau of Land Management and Umpqua Watersheds

**CONTACTS** Justin Hadwen: 541-957-3260, jhadwen@fs.fed.us

# Wallowa-Whitman National Forest

In 2017, the Wallowa-Whitman National Forest successfully completed the following terrestrial wildlife habitat enhancement/restoration work, surveys, and education/outreach efforts:

- Surveyed all known historical sites for upland sandpiper on the forest.
- Surveyed for marten and montane red fox at 12 remote camera stations.
- Surveyed for four terrestrial mollusk species at 42 locations.
- Partnered with a local non-profit to put on our second annual, 4 day outdoor school, serving over 150 6th graders in La Grande.
- Staffed Forest Service booths at Earth Day and Watershed festival events.
- Partnered with the Greater Hells Canyon Council to utilize citizen science to help monitor effects of past projects.
- Surveyed for peregrine falcon, golden eagle, bald eagle, goshawk, great gray owl, bumble bees, and Columbia spotted frog.
- Guided great gray owl field trips in cooperation with Portland Audubon Society.
- Collaborated with Nez Perce Tribe on a California condor habitat feasibility study.
- Assisted with the Prairie City 6th Outdoor School at Wallowa Lake State Park.
- Assisted with the Ladd Marsh Bird Festival which included guided birding tours on the W-W NF.
- Continued to use prescribed fire to improve elk habitat in the Chesnimnus area where poor elk distribution is a concern.
- Implemented 30 miles of road decommissioning and promulgated closures on an additional 80 miles of road in the Bald Angel project area for elk security.
- 8,282 acres of young forests thinned using variable spacing and retention patches for wildlife.
- 8,115 acres treated with prescribed fire to enhance habitat for big game, white-headed woodpecker, and other species.

BY THE NUMBERS		
ACRES	FUND CODE	ACTIVITY
8,115	WFHF, NFWF	Prescribed fire
4,082	NFSU	Habitat enhancement from wildfire
8,282	NFWW, NFWF	Non-commercial thinning for wildlife
13,360	CMRD, NFWF	Road decommissioning
223	NFWF	Browse repellent
8	NFWF	Spring development
<b>34,070</b>	<b>TOTAL</b>	



**Top Right:** *Anguispira kochi*, one of the species detected during mollusk surveys. **Bottom Right:** Great Gray Owl.

**PARTNERS & COOPERATORS** Oregon Dept. of Fish & Wildlife, Wallowa Resources, Rocky Mountain Elk Foundation, Oregon Hunters Association, Xerces Society, Friends of Ladd Marsh, Greater Hells Canyon Council, Blue Mountains Conservancy, Hells Canyon Bighorn Sheep Restoration Initiative, Portland Audubon Society, Prairie City School District, Oregon State Parks

**CONTACTS** Mark Penninger: 541-523-1285, mapenninger@fs.fed.us

## Program Highlight Bald Angel Access Management

The Bald Angel Restoration Project on was developed about ten years ago to address several resource concerns. The vegetation treatments would address returning conifer stands to more resilient conditions and more reflective of the pre-fire exclusion period. Non-commercial thinning and prescribed burning would improve forage for big game, while setting forested stands up to better tolerate more frequent low intensity wildfires. White-headed woodpecker, flammulated owl, and pygmy nuthatch would benefit from restoration of mature, open ponderosa pine stands.

Another important part of this project was to address high open road densities that were contributing to poor elk distribution and conflicts between public land users. The Bald Angel decision notice included decommissioning roads that were deemed unneeded for future management or access for fire suppression or recreation. Additionally, a promulgated closure to motorized vehicles would apply to the entire project area, and 80 miles of roads that would provide for future management and non-motorized recreation access.

Implementing the road work in this area was delayed until the summer of 2017 primarily due to a lack of funding. The logging, burning, and thinning were completed in 2012.

The area provided almost no security habitat for elk due to the number and arrangement of open roads. The road closures and decommissioning resulted in an increase in security habitat from 0.05% to 17.25% of the project area. The closure order that will restrict motorized travel to only designated open routes is currently being finalized.

This work was completed through the Good Neighbor Authority with Oregon Dept. of Fish & Wildlife providing the equipment and operator and the Forest Service providing oversight and directing the work.



Security habitat is an important factor influencing elk distribution and bull elk escapement.



**Above:** Using Good Neighbor Authority to complete road work. **Right:** Mule deer are highly vulnerable to road related mortality.



# Willamette National Forest

In 2017 the Willamette National Forest exceeded planned wildlife targets. Highlights include:

- 1,975 acres of snag and downed wood creation.
- Commercially thinned 693 acres of second growth and pre-commercially thinned 337 acres in Late Successional Reserves to improve future habitat for northern spotted owls.
- A historic fire year, 29,922 acres of wilderness had beneficial wild fires.
- Surveyed for bald eagles, bees, butterflies, Oregon spotted frogs, red tree voles, pileated woodpeckers, mollusks, spotted owls and other rare wildlife species.
- Conducted numerous environmental education presentations and hosted an International Visiting Biologist on the MRRD.
- Improved 2,372 acres of habitat for migratory birds by screening vent pipes.
- With Deschutes NF, completed wildlife stewardship plans in three wilderness areas and evaluated impacts of wilderness visitor use on wildlife.
- Working with volunteers, found breeding monarch butterflies on scattered milkweed clusters in the dry Douglas-fir zone of the Middle Fork Ranger District. Historically, this area was more open savanna and the milkweed meadows were vestiges of a former prairie habitat component. No breeding monarch populations were previously known on or near the forest.



Above: Female monarch butterfly laying eggs. Below: A BioBlitz in the Waldo Lake Wilderness surveyed for rare and sensitive species. Detections included new sites for western bumblebees, breeding bumbleheads, and sandhill cranes.



BY THE NUMBERS		
ACRES	FUND CODE	ACTIVITY
29,922	WFSU	Beneficial wildfires
7,596	CWKV	KV wildlife treatments
1,781	SRS2	PAYCO
1,193	NFTM	Beneficial timber harvests
1,048	NFWF	Wildlife improvements
398	PTNR	Partnerships, including NFXN
<b>42,607</b>	<b>TOTAL</b>	

**PARTNERS & COOPERATORS** Boy/Girl Scouts of America, Bonneville Power Administration, Pacific Gas and Electric, Rocky Mountain Elk Foundation, ODFW, Oregon Hunters Association, National Wild Turkey Federation, Northwest Youth Corps, North American Butterfly Association, U.S. Fish and Wildlife Service, Bureau of Land Management

**CONTACTS** Joe Doerr : 541-225-6433, jdoerr@fs.fed.us

## Program Highlight Hunter Partnership Organizations

In 2017, the Willamette National Forest completed 4,397 acres of elk and deer enhancement with road closures, weed treatments, seeding, planting, meadow restoration, browse cutback, mowing, prescribed burning, fertilizing, pruning, and use of commercial timber harvest to create early seral habitat. Many of these projects were done in cooperation the Rocky Mountain Elk Foundation, Oregon Hunters Association and other hunter organizations. This continues a more than century-old tradition of hunting groups playing a lead role in the conservation and protection of wildlife. Hunters participate by engaging in work parties, such as an annual volunteer working weekend to maintain big game forage areas on the Detroit RD, and by direct grants to support important wildlife enhancement. In addition to benefiting game animals, early seral and meadow restoration provides key habitat for neo-tropical birds and pollinators. Nature also provided a historic boost to long-term big game forage on the Forest with 70,000 acres of wildfires in 2017.



**Above Left:** Rocky Mountain Elk Foundation volunteers creating critter piles from conifer encroachment slash in a meadow restoration project. **Above Right:** Monitoring of meadow restoration resulted in the first known detection of the rare western bumblebee on the Sweet Home Ranger District since 1970. **Left:** Youth Conservation Corps crew spreading sawdust to suppress False Brome, an aggressive invasive weed, in an experimental treatment funded by Rocky Mountain Elk Foundation. Projects supported by hunter groups provide an important opportunity for youth to engage in conservation work.

## Bighorn Sheep & Mountain Goat

In 2017 the national Full Curl Program duties were delegated to respective regional wildlife programs, thereby ending the program as it has functioned for nearly thirty years. Mark Penninger continues to serve as a technical resource for Region 6 for wild sheep and goat issues.



**Above:** Net gunning bighorn ewes near Troy, Oregon, Umatilla NF. **Below:** Mountain goats, specialized mountaineers.



- Performed the duties of Full Curl Program Lead through March 2017;
- Assisted the Blue Mountains Forest Plan Revision Team by authoring the bighorn sheep effects section of the FEIS, responded to public comments regarding bighorn sheep, and negotiated management standards and guidelines for bighorn sheep with state and Tribal partners;
- Assisted in the capture, testing, and radio collaring of 118 bighorns in Hells Canyon, Wenaha River, and Grande Ronde River drainages;
- Represented the Forest Service on the Hells Canyon Bighorn Sheep Restoration Initiative, including an oral presentation on the Initiative at the Oregon Chapter of TWS Annual Meeting in Pendleton;
- Technical assistance to multiple units regarding disease risks from pack goats;
- Organized and staffed a booth at the Wild Sheep Foundation's annual convention; and
- Managed an agreement with Washington State University for research on the domestic sheep/ bighorn sheep disease complex.

### MOUNTAIN GOAT, CENTER OF EXCELLENCE, SUMMARY OF SERVICES:

- Technical contact for National Park Service team conducting an EIS to address non-native mountain goats on the Olympic Peninsula;
- Responded to inquiries from the public regarding human safety around mountain goats;
- Assisted ODFW with the annual mountain goat census in the Elkhorn Mountains; and
- Provided technical assistance on mountain goats to the RO and other FS units on request.

## Blue Mountains Elk Initiative & Rocky Mountain Elk Foundation

In 2017, the Rocky Mountain Elk Foundation and Blue Mountains Elk Initiative funded 17 projects across the state of Oregon, directly enhancing elk habitat on 9,109 acres.

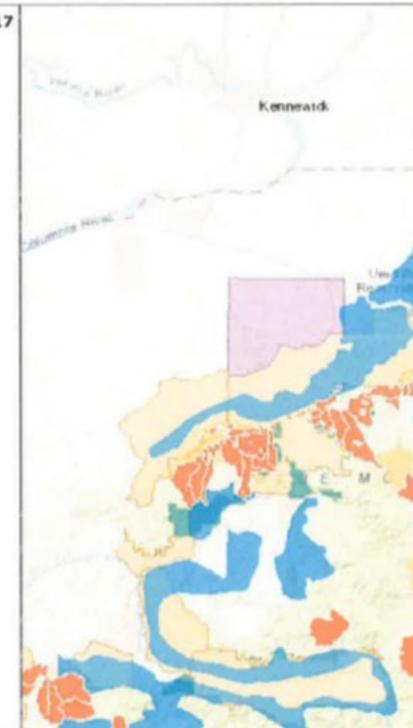
The Rocky Mountain Elk Foundation provided \$269,750, while the Blue Mountains Elk Initiative contributed \$115,000; \$91,000 USFS, \$5,000 Oregon Department of Fish and Wildlife (ODFW), and \$19,000 Blue Mountains Habitat Restoration Council (railroad mitigation funds). This long-standing partnership leveraged \$1,343,652.

The BMEI Operations Committee worked cooperatively with Forest Service Biologists, RMEF, ODFW, Washington Department of Fish and Wildlife and the Confederated Tribes of the Umatilla Indian Reservation to identify priority areas and actions for elk habitat improvement. BMEI priorities include: to improve elk security on public lands; to maintain or improve elk distribution on public lands; and to reduce elk damage to private lands. The BMEI project evaluation criteria were updated to address these factors and an ArcGIS online project was developed to assist project proponents in project selection and development.

### Blue Mountains Elk Initiative Data Viewer

elk\_security\_areas\_merged\_all\_blues\_07212017

- Elk Critical Winter Range
- Elk Critical Summer Range
- BMEI Priority Areas (nonFS)
  - BMEI Priority Areas nonFS
  - Chronic Damage
  - High Emphasis for Habitat Improvement
  - Little to No Tolerance



ArcGIS online project with BMEI Priority Areas

BY THE NUMBERS			
FOREST	# OF PROJECTS	BMEI FUNDING	RMEF FUNDING
Deschutes	1	N/A	\$20,000
Fremont-Winema	1	N/A	\$10,000
Ochoco	2	\$35,900	\$40,000
Malheur	1	\$5,100	\$17,500
Umatilla	2	\$15,000	\$25,000
Umpqua	1	N/A	\$7,645
Siuslaw	1	N/A	\$15,000
Wallowa-Whitman	2	\$40,000	\$60,000
Willamette	3	N/A	\$51,602
Research	2	N/A	\$14,003
Other	1	\$19,000	\$9,000
	<b>TOTAL</b>	<b>\$115,000</b>	<b>\$269,750</b>

- Solicited RMEF project proposals from Forest Service units in Oregon and BMEI proposals from the four Forests in the BMEI area – Ochoco, Malheur, Umatilla, and Wallowa-Whitman – and State, Tribal, and private cooperators.
- Assisted project proponents in the development of habitat restoration projects and project proposals.
- Conducted site visits to BMEI/RMEF projects.
- Served as the Forest Service liaison and voting member of the both the OR and WA RMEF project advisory committees (PAC); represented the BMEI at the both the Oregon and Washington PAC meetings.
- Reviewed and evaluated 41 BMEI and RMEF proposals.
- Assisted the OR RMEF PAC in the prioritization and selection of the projects to be funded.
- Facilitated the distribution of BMEI funds to successful applicants.

## Carnivores

### Significant Carnivore Events in 2017:

- USFWS reopened comment period for proposed rule to list wolverine as threatened and initiated new status review; Oct 2016.
- Washington Wildlife Commission uplisted the state status of lynx to endangered; Dec. 2016.
- USFWS decision that coastal marten is not warranted for listing was challenged in court; March 2017.
- USFWS published final rule to de-list the Yellowstone DPS of the grizzly bear; June 2017.
- Gray wolves continued to expand in eastern WA and OR with each state having approx. 20 packs/groups and 115 individuals. WDFW collared a wolf on west side of Pacific Crest in WA. Lethal control of wolves following livestock depredation continued to make the news.



### 2017 Accomplishments

- Provided partial funding for 6 projects:
  - Evaluating efficacy of long-term remotely lured camera sets for detecting coastal marten and fisher; OLY and RRS NFs.
  - DNA analysis of hair samples from Cascade red fox and wolverine collected on Naches RD; OKW.
  - Sierra Nevada red fox camera station surveys on Diamond Lake RD; UMP NF.
  - Camera, hair snag and scat surveys for fisher, fox, and wolf on the DES NF.
  - Fisher, fox, and wolverine DNA survey on W-W NF.
  - Western States Wolverine survey on the OKW NF.
- Year 2 of fisher reintroduction to the Southern Cascades included 30 fishers released at the Cispus Center on the Gifford Pinchot NF and 16 more on Mt. Rainier NP.
- Assessed susceptibility/risk of OKW NF to ramifications of the Salix/Cottonwood ruling regarding lynx critical habitat.
- Provided support for first year of the UW Predator/Prey Interaction research project on the Okanogan-Wenatchee and Colville NFs.
- Provided support for the North Cascades Grizzly Bear Restoration EIS. Draft EIS received 120,000+ public comments.



### PARTNERS & COOPERATORS

BLM, Cascade Carnivore Project, Cascadia Wild, Conservation NW, Crater Lake NP, Friends of the Central Cascades Wilderness, High Desert Museum, Mt. Rainier NP, Nisqually Tribe, North Cascades NP, ODFW, ORNRC, OSU, PNW Research, Shuswap Nation, Univ. Calif. Davis, USFWS, USGS, UW, WA Conservation Science Institute, WDFW, Wenatchee Fire Sciences Lab, Wildlife Ecology Institute, Woodland Park Zoo, WSDOT, WSU

### CONTACTS

John Rohrer, Okanogan-Wenatchee National Forest  
509-996-4001, jrohrer@fs.fed.us

## Amphibians & Reptiles

### 2017 accomplishments include:

- Being the co-chair for NW Partners in Amphibian and Reptile Conservation (NW PARC); also continuing on as treasurer.
- Organizing and heading the NW PARC Steering Committee, managing quarterly calls and newsletters, providing input to website, recruiting new members, and planning the annual meetings.
- Assisting with organizing the 2017 annual meeting, held in Arcata, CA. Theme this year: Research and Conservation Priorities for Amphibians.
- Assisting with planning the 2018 meeting, to be held in Portland, OR, with the theme of Research and Conservation Priorities for Reptiles.
- Attending the PARC Joint National Steering Committee in Spokane, WA, March 2017. Topics: PARC strategic action plan, diversity and inclusion within PARC, encouraging regional participation, partnerships and funding.
- Attending the Washington meeting to designate PARCAs, or Priority Amphibian and Reptile Conservation Areas, in the state, August 2017.
- Beginning a testing program for the salamander fungus, Bsal, with rough-skinned newts on Olympic National Forest.
- Beginning discussions with the non-profit, citizen science organization, Adventure Scientists, on a program to have volunteers gather data, including amphibian and fish presence, water levels, and temperature, at vulnerable, high-elevation lakes.
- Participating in quarterly calls with the other regional herp COEs.



**Top:** PARC Joint National Steering Committee, Spokane, WA, March 2017. **Middle:** Swabbing a rough-skinned newt in order to test for the salamander fungus, Batrachochytrium salamandrorans, or Bsal. **Bottom:** NW PARC Steering Committee members with Hartwell Welsh, recipient of the 2017 NW PARC Luminary Award, Arcata, CA.

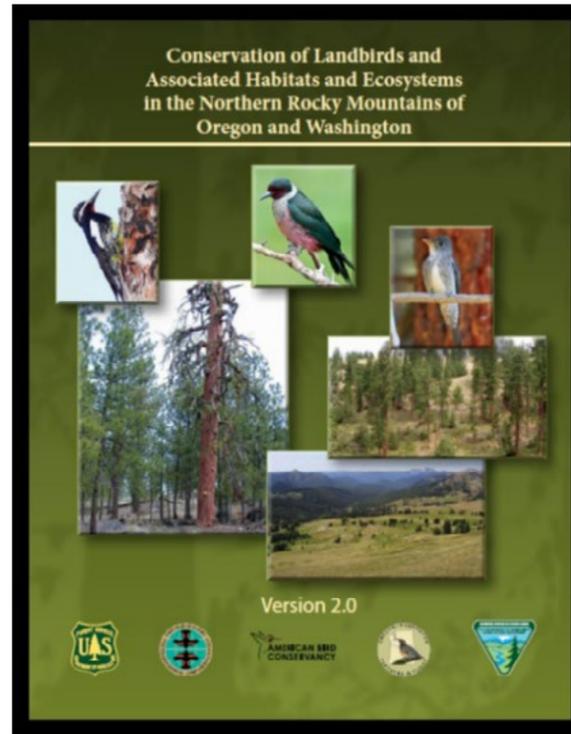
### CONTACTS

Betsy Howell, Olympic National Forest  
360-765-2230, blhowell@fs.fed.us

## Avian Conservation Program

2017 accomplishments include:

- Participate on the Species of Conservation Concern Work Group for the 2012 Planning Rule, continue to incorporate Avifauna as indicators of habitat types and for integrated bird monitoring throughout the region.
- Manage assistance agreements with Klamath Bird Observatory, the American Bird Conservancy, North West Wildlife Science, USGS, and the Oregon Eagle Foundation.
- Worked with the Klamath Bird Observatory and the ISSSSP program to begin writing a Conservation Assessment for the Harlequin Duck.
- Working with the Mt. Baker Snoqualmie on a funded CCS proposal to incorporate the Landbird Conservation Plans into the Stillaguamish Planning effort. We are working with the Silviculturalist to write the prescriptions for the stands based on the recommendations for focal species within the plans.
- Working with the Oka/Wen. and Mt. Hood NF's on a funded CCS to manage the two Hawkwatch sites into one regional resource with a "friends of group" and annual festivals that highlight the importance of these jewel watchable wildlife sites to the regions wildlife program and contributions to raptor migration research.
- Serve as the FS/BLM liaison to the Partners in Flight National Steering Committee and Western Working Group. Participate on the Western Hummingbird Partnership, Steering Committee.
- Put on the first Regional Avian Program Webex highlighting the tools available for incorporating PIF information into our planning processes.
- Continue to work with avian partners to develop a regional monitoring strategy for avifauna.
- Assist biologists with issues on the ground that concern all things avian.
- Worked with the American Bird Conservancy to update, rewrite, format, print and mail out the new Conservation for Landbirds in the Northern Rocky Mountains of Oregon and Washington all units.
- Worked with USGS, the ISSSSP program and BLM Roseburg on year two of a Purple Martin (PUMA) study in the Willamette Valley.
- Working with Klamath Bird Observatory to use the USGS PUMA study information to write a conservation assessment for the species.



## Greater Sage-grouse

In 2017 the Malheur National Forest hosted the "Center of Excellence" (COE) for 5 National Forests in Region 6 with greater sage-grouse and their habitat. Accomplishments and highlights include:

- Received ~\$300,000 from the Forest Service Washington Office for sage-grouse conservation. The Ochoco, Deschutes, and Fremont-Winema National Forests accomplished restoration and conservation efforts on approximately 13,700 acres of sage-grouse habitat. Accomplishments include juniper removal, native seed collection, invasive weed surveys and treatments, fence marker and escape ramp installations, West Nile Virus testing, habitat inventory, and remote camera monitoring.
- Region 6 continues to work and align with the BLM, ODFW, USGS, and other partners on implementing the 2015 Sage-grouse Plans.
- The final draft Blue Mountains revised Forest Plan included sage-grouse standards, guidelines, objectives, and monitoring strategies consistent with the 2015 Sage-grouse Plan and amendments made to Forest Plans in ID, MT, NV, UT, CO, and WY.
- COE supported a Rocky Mountain Research Station proposal to the National Climate Change Program for sagebrush restoration and production of native plant materials.



**Above:** Male greater sage grouse. **Upper right:** Worked with East Cascades Audubon Society to install fence markers on fences rated with a 'high/very high' collision risk; totaling over 5 miles of fence and 12,000 fence markers. **Lower right:** Worked with ODFW, East Cascades Audubon Society, Prineville BLM, and USFWS to trap and test mosquitos for West Nile virus.

**PARTNERS & COOPERATORS** Oregon Office of the Governor, Oregon Solutions, Burns-Paiute Tribe, Confederated Tribes of Warm Springs, Natural Resources Conservation Services, ODFW, U.S. Fish and Wildlife Service, Oregon Department of Forestry, Oregon Watershed Enhancement Board, BLM, Oregon Cattlemen's Association, Harney County, Lake County, Crook County, Baker County, Deschutes County, Union County, Malheur County, The Nature Conservancy, Defenders of Wildlife, Oregon Natural Desert Association, Oregon Department of Transportation, Audubon Society

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## Upland Game Bird

The Sisters Ranger District Wildlife Biologist on the Deschutes National Forest functions as a "Center of Excellence" for upland game bird related partnerships within Oregon and Washington. The primary duties and accomplishments include:

- National Wild Turkey Federation (NWTf)
  - NWTf National Convention: "Future of Conservation Delivery"
  - Presentations and discussion topics included "Power of the Partnership" and "Collaboration for Conservation". Attended by USFS, BLM, NRCS, State and Private Forestry, and NGOs.
  - Breakout Sessions: East/West partnership discussion on effectively delivering conservation work.
- Regional Update Presentation – Presented on Regional Accomplishments associated with NWTf/FS initiatives for FY17. Also highlighted one success story that exemplified the Making Track Partnership for Region 6. The session was attended by W.O. Leadership, including Chief Tidwell.
- Making Tracks Steering Committee Member (MTC): Quarterly Meetings - Organized by Making Tracks National Coordinator Tracy Grazia. For FY 17 assisted with review and provide feedback for the MTC Strategic Vision for 2018 - 2023. Provide Feedback to MTC's Annual Action Plan (AAP) for FY 18. Lastly, the first to develop a Regional AAP for R6. Providing a template for the other Regions to follow, in assistance with National Coordinator Tracy Grazia.
- Partnership Development
  - Support the NWTf Regional Biologist with stewardship projects. Assisted the Umatilla National Forest with the Popple Aspen Project. Participated in a presentation to the Malheur FLT on the Starr Aspen Project.
  - NWTf's Superfund habitat enhancement process: In FY 17, projects were funded on the Colville, Malheur(2), Umatilla, and Umpqua. Acres improved; Approximately 2,400 acres.
- Other Upland Game Bird Coordination:
  - Attend WDFW Forest Grouse wing bee with Ruffed Grouse Society (RGS) members and FS Biologists.
  - Work with local FS Wildlife Bios to provide RGS with potential volunteer projects that assist with habitat improvement.
  - Work with Dave Budeau ODFW Game Bird Program Coordinator on Mtn. Quail translocation project on the Deschutes and Ochoco NF
  - Continue to provide region specific wing bee data from harvested grouse and mt. quail in Oregon to FS biologists.



Making Tracks Steering Committee



Sonny Paz Assists with Wing Bee

## DecAID

FY 2017 witnessed a tectonic shift in DecAID. By the end of the fiscal year, DecAID ver 3.0 was up and running for beta-testing on its new website platform and with a completely remodeled look. Much of 2017 was spent working towards this goal as every part of the older website was scrutinized, prioritized and edited for content. Full release and use of version 3.0 is expected mid-FY 2018.

The biggest impact was Kim Mellen-McClean's retirement at the end of April. Barbara Garcia was welcomed as the new Regional Wildlife Ecologist. She was able to shadow Kim on the website version update in preparation for its release after Kim's retirement.

Steven Acker joined as a Center of Excellence for DecAID focusing on questions relating to the vegetation inventory data and its use.

New points of contact for DecAID questions are:

- Barbara Webb – implementation and interpretation
- Steve Acker – vegetation data
- Barbara Garcia – wildlife data and lead website contact

2017 Accomplishments

- Complete overhaul of DecAID website:
- Recalculation of vegetation inventory data with updated FIA plot data
- Edit existing information and narratives on website
- Update photos and wildlife data
- Move website to new platform and beta-test functionality (more edits)
- Presentation/training to Umpqua and Willamette National Forests biologists





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