



Pacific Northwest Region

Invasive Plants

Program Accomplishments



Klamathweed beetles, *Chrysolina hypericin*, biological control on St. Johnswort on the Okanogan-Wenatchee National Forest

Fiscal Year 2020



Pacific Northwest Region

2020 State & Private Forestry Invasive Plant Accomplishments

State & Private funds help maintain capacity for these important programs that protect State, private, tribal and USFS land from the serious economic and ecological impacts of noxious weeds. Accomplishment highlights from 2020 include:

Oregon Department of Agriculture

- Supported the post-fire assessments for invasive plants for the Beachie/Lionshead, Archie, Holiday Farm and Riverside Fires.
- Released two new biological agents on gorse (Sericothrips staphylinus) and knotweed (Aphalara itadori).
- Expanded biological control work, exceeding 2019 accomplishments, despite unprecedented challenges, including COVID-19 restrictions, budget shortfalls and a historic fire season.
- Weed Free Forage Program completed 40 inspections for 27 growers and certified 2,882 acres as weed free.
- Weed free gravel/rock source program resulted in 2,513,000 tons of material certified as weed free.
- Biological Control Programs worked with 49 cooperators, conducted 131 releases, treated 655 acres, and monitored 82 release sites in 17 counties.
- Conducted eight education presentations at four events and supported planning for the Interagency Noxious Weed Symposium.
- WeedMapper data collected from 23 contributors and added 128 state listed weed species locations.





Figure 1.Eric Coombs (ODA) and George Markin (USDA) picture of gorse thrips biocontrol.



Figure 2. Educational materials produced by Washington State Noxious Weed Program on tree-of-heaven and spotted lanternfly.

Washington Department of Agriculture

- Funds supported the Washington State University Extension Integrated Weed Control Project which develops, conducts and monitors biological control agents on all lands in Washington.
- Provided training and continuing education credits to pesticide applicators as well as educating agency staff and citizens how to effectively use biological control.
- Treated 2,375 acres of priority noxious weeds on State and private land using biological, chemical, and manual methods.
- Developed a plan for priority sites to inventory tree-of-heaven for early detection of spotted lanternfly.
- New biocontrol agents for knotweed and hawkweed control are being introduced, controlling 1,000 acres.
- The State developed a small grant program for counties to fund early detection/rapid response projects for priority noxious weeds. The counties would not have the ability to treat these infestations without the support of the State & Private Forestry funds.

Pacific Northwest Region, State & Private Forestry, PO Box 3623, Portland, OR 97204 | Contact: Shawna L. Bautista, Regional Invasive Plant Program Manager, 503-808-2697.



Pacific Northwest Region, Continued 2020 National Forest Invasive Plant Accomplishments

National Forests treated 43,695 acres and inventoried 155,805 acres despite impacts from COVID-19 and historic wildfires. Our 220 partnerships were key to completing this year's accomplishments. Partners also provided more than \$8,740,156 towards treatments. Highlights of fiscal year 2020 accomplishments include:

- Deschutes NF, Ochocho NF, Portland General Electric and the Pacific Northwest Research Station Dive Team surveyed Lake Billy Chinook for Eurasian watermilfoil, featured on local news reaching over 1,000 people.
- Hardwood, sensitive species and wildlife habitat were restored through invasive plant treatments for Sage grouse, Oregon spotted frog, *Sisyrinchium sarmentosum*, Peck's penstemon, mardon skipper, *Sidalcea hirtipes* and *Ophioglossum* habitat.
- Mt. Baker Snoqualmie NF, Skagit Fisheries
 Enhancement Group, King Co. Noxious Weed Control
 Board, Snohomish Co. Noxious Weed Control Board,
 and Sauk-Suiattle Indian Tribe treated 889 acres of
 knotweed in the Skykomish, Tye, Sauk, Suiattle, and
 Skagit Rivers.
- The Olympic NF and Rocky Mountain Elk Foundation funded treatments in the Dungeness River watershed completed by Clallam Co. Noxious Weed Control Board and the Washington Conservation Corps.
- On the Rogue River-Siskiyou NF, the Alyssum
 Working Group supported significant reductions in
 existing populations of yellowtuft alyssum, a Statelisted noxious weed. Partners include BLM, Oregon
 Department of Agriculture, The Nature Conservancy
 and others.



Figure 1. Oregon Department of Agriculture preparing to treat Yellow floating heart at Beaver Pond, Umpqua NF.



Figure 2. A contractor sprays garden loosestrife along Fish Lake, on the Wenatchee River District. The project is a partnership with Chelan County Noxious Weeds and is funded by a WA Department of Ecology grant.

- The Ochoco NF Invasive Plant Education Liaison produced two lesson plans that educators can use for conservation education.
- The Friends of the Columbia Gorge contributed 94 hours towards pulling invasive plants in the Scenic Area
- Umpqua NF completed its 6th year of treatments of yellow floating heart, reducing the population by 99%.
- Ventenata and medusahead control occurred on Okanogan-Wenatchee NF, Mt. Hood NF, and Fremont-Winema NF.
- Mount Hood NF cooperated to treat orange and meadow hawkweed (*Hieracium aurantiacum*, *H. caespitosum*) within a Bonneville Power Administration powerline corridor (Lolo Pass). Treatments conducted by Clackamas Soil and Water Conservation District, Portland Water Bureau, Orgeon Department of Agriculture, and FS staff.
- Invasive plant inventory and treatment to achieve Wilderness Stewardship work occurred on Wallow-Whitman NF, Willamette NF, Gifford Pinchot NF, Malheur NF, Siuslaw NF, Umatilla NF, Umpqua NF.
- Forests conducted 101 gravel pit inspections.

Pacific Northwest Region, State & Private Forestry, PO Box 3623, Portland, OR 97204 | Contact: **Shawna L. Bautista**, Regional Invasive Plant Program Manager, 503-808-2697.



Columbia River Gorge National Scenic Area

2020 Invasive Plant Accomplishments

Invasive plant control is focused on treatments to specific sites that are threatened by infestations, early detection/rapid response sites, and sites undergoing restoration. Most treatments are completed by partners.

Highlights include:

- Invasive plant treatments continue at key restoration sites such as Sams Walker, St. Cloud, Balfour-Klickitat, Collins, Moorehead-Fischer, with most accomplished through partnerships and volunteers.
- Skamania County continued treatment of an infestation of butterfly bush on Woodard Creek.
 After the treatments, appropriate restoration with native plants will help prevent re-infestation.
- Invasive plant control continues at Sandy River Delta in support of the ongoing restoration of native hardwood forests. Control of blackberries continued in preparation for planting more native shrubs and forbs for pollinators.
- Continued partnership with Friends of the Columbia River Gorge Public Land Stewardship program.
 Despite COVID-19, 24 volunteers contributed 94 hours towards pulling invasive plants throughout the Scenic Area.
- Treated 806.3 acres using herbicide, manual, mechanical, and competitive plantings.



Figure 1. Volunteers pulling EDRR site of herb Robert along Dog Mountain trail.



Figure 2. Skamania County noxious weed program surveying in a sea of weeds as part of the Woodard Creek restoration project.

2020 Accomplishments

Invasive Plants Treated = 806.3 acres

Monitoring = 727.6 acres

Base Invasive Plant Program = 484.6 acres

Trail Maintenance Funding = 14 acres

Partnership funding = 307.7 acres

Partners/Cooperators

Lower Columbia Estuary Partnership, Sandy River Watershed Council, Ash Creek Forest Management, Friends of Sandy River Delta, Friends of Trees, Skamania County Weed Department, Klickitat County Weed Dept, Oregon Equestrian Trails, East Multnomah Soil and Water Conservation District, Friends of the Gorge, Center for Ecodynamic Restoration, Oregon Parks and Recreation Department, Clark College

Columbia River Gorge National Scenic Area, 902 Wasco Ave Ste 200, Hood River, OR 97031 | Contact: Sarah Callaghan, Botanist/Invasive Plants, 541-308-1717; Katie Santini, Biological technician, 541-308-1748.



Colville National Forest

2020 Invasive Plant Accomplishments

The Colville National Forest combats invasive plant infestations and spread through treatments, collaboration, integrated prevention methods and education.

- During 2020, the Forest Service partnered with the Pend Oreille County Weed Board to continue efforts for reducing a population of flowering rush (*Butomus umbellatus*) along the Pend Oreille River which was located within the Riverbend Shoreline Stabilization Project.
- Continued the work to conduct pre/post treatments of invasive plants in sequence with the 21-year vegetation management planning schedule and meet Forest Plan objectives.
- Completed weed free inspections and certifications for multiple commercial rock sources that deliver gravel, fill and barrow material for use on the National Forest.
- Worked with county weed boards to coordinate efforts regarding right of way treatments leading onto the Forest.
- Additional treatment capacity was increased through the Good Neighbor Authority agreement with the State of Washington.



Figure 1. Herbicide application of road prism in project area. Treatment was applied after harvest activities.



Figure 2. Area was within a project area and burn. Native seed was applied as integrated prevention approach.

- Worked with internal partners to apply native seed in areas where soil-disturbing activities have taken place. Exceeded annual objective of 50 acres of restoration of native vegetation through mulching, seeding, and planting.
- Additional rock source pits and road prisms had herbicide applications applied to reduce invasive plant populations and the potential for spread from these areas.

2020 Accomplishments

Invasive Plants Treated = 2,030 acres

Funding

Base Invasive Plant Program = \$53,389

Collaborative Forest Landscape Restoration = \$67,847

Partners/Cooperators

County Weed Boards, Washington Department of Natural Resources, Colville National Forest Grazing Permittees, Stimson Lumber Company, LLC, Stevens County Conservation District, and Washington State Department of Transportation

Colville National Forest, 765 South Main Street, Colville, WA 99114 | Contact: **Brandon Weinmann**, Invasive Plants Program Manager, 509-684-7225.



Deschutes National Forest 2020 Invasive Plant Accomplishments

The Invasive Plant program partners with all other natural resource program areas on the Deschutes National Forest to plan and implement resiliency projects of all types.

Early Detection

- Deschutes NF, Ochocho NF, Portland General Electric and the Pacific Northwest Research Station Dive Team surveyed Lake Billy Chinook for Eurasian watermilfoil, featured on local news reaching over 1,000 people.
- Annual grass surveys conducted near Peck's milkvetch and Peck's penstemon rare plants, in cooperation with Prineville BLM and the Ochoco NF. Funded by Interagency Special Status Sensitive Species Program.

Restoration

- Treated invasive plants in utility corridors and the Deschutes River as part of restoration efforts in partnership with Bonneville Power Administration, TransCanada, and the Deschutes NF Aquatics Program.
- Treated ribbongrass, reed canarygrass, and yellow flag iris on Metolius River, and reed canarygrass at Suttle Lake and Trout Creek Swamp with Oregon Department of Agriculture and Friends of the Metolius.

Education and Outreach

- Conducted an on-line aquatic invasives training for 35 participants. Partners included Portland State Univ., Deschutes County Noxious Weed Board, Oregon Department of Fish and Wildlife, and Environmental Science Associates.
- Developed aquatic invasive species materials for outreach events.



Figure 1. Mike Crumrine, USDA Forest Service, releasing biocontrol agents.



Figure 2. Heart of Oregon knapweed spray crew

2020 Accomplishments

Invasive Plants Treated = 3,398 acres Inventories = 6,337 acres

Monitoring = 8 acres

Funding

Base Invasive Plant Program = \$ 183,000 Secure Rural Schools (Title II) = \$25,907

Partners/Cooperators

Oregon Dept. of Agriculture, Oregon Dept. of
Transportation, Klamath and Deschutes Counties, Deschutes
County Noxious Weed Board, Central Oregon
Intergovernmental Council, Heart of Oregon Corps, Kev
Alexanian, Midstate Electric, Friends of Metolius, Camp
Sherman Weed Warriors, Friends of Cascades Wilderness,
Coalition for the Deschutes, Discover Your Forest,
Ecosystems Management Inc., Black Butte School,
Volunteers, Portland State University, Portland General
Electric, Pacific Northwest Research Station, Environmental
Science Associates

Deschutes National Forest, 63095 Deschutes Market Road, Bend, OR 97701 | Contact: **Mike Crumrine**, Invasive Plants Program Manager, phone: 541-233-3146

Fremont-Winema National Forest

2020 Invasive Plant Accomplishments

Due to a very active year for large wildfires, and the COVID-19 pandemic, it was difficult to maintain typical annual accomplishments, but highlights include:

- Agreement with Lake County Cooperative Weed Management Area resulted in 494.5 acres treated.
- Agreement with Klamath County Public Works Department resulted in 390 acres treated.
- Partnership with Klamath Watershed Partnership and Lake County Weed Management area to treat adjacent public lands using Title II funding.
- West Zone continued to develop their in-house herbicide programs and expanded treatment to include ventenata.
 This year we were able to treat 19 acres (34 sites) and improve our effectiveness.
- 2020 was the fourth year of treatment for 160 acres of annual invasive grasses (ventenata and medusahead rye) on East Zone. These acres were 50%-70% infested prior to treatment and now are 5%-15% infested with scattered patches.
- East Zone decreased active Dyer's woad sites from 219 sites (44.8 acres) that resulted from the 2012 Barry Point Fire down to 83 sites (20 acres) in 2020. Even though 20 new sites were discovered in 2020, most were single plants.
- Participation on Klamath County Weed Board and Lake County Cooperative Weed Management Area.
- Began treatment of reed canarygrass for Hog Creek Restoration project.



Figure 1. New musk thistle Site on Bly Mountain.



Figure 2. Ventenata dubia

2020 Accomplishments

Invasive Plants Treated: 1,973 acres (1706 sites)

Herbicide: 916 acres (846 sites), Manual: 1057 acres (860 sites)

Monitoring

Inactive/No weeds last year = 340 acres (1392 sites) Eradicated = 39.4 acres (172 sites)

Inventories

24,300 acres surveyed (timber sales, prescribed burning areas, and suitable/occupied sensitive plant habitat). Found 39.3 infested acres – 138 sites

Planning Input

Input to nine NEPA decisions and four4 Burned Area Emergency Response reports.

Funding

Base Invasive Plant Program = \$ 107,357 Collaborative Forest Landscape Restoration = \$29,966 Lake Co. Weed Mgmt. Area Partnership funding = \$114,074 Klamath Co. Public Works Dept. Partnership = \$80,000

Partners/Cooperators

Klamath County Public Works Dept., Lake County Cooperative Weed Management Area, Integral Youth Services, Klamath Watershed Partnership

Fremont-Winema National Forest, 1301 South G Street, Lakeview, OR 97630| Contact: Jeannette Wilson: East Zone Botanist, 541-576-7593; Erin Rentz: West Zone Botanist, 541-885-3444; Ben Goodin: Botany Program Manager, 541-947-6251.



Gifford Pinchot National Forest

2020 Invasive Plant Accomplishments

Social distancing is relatively easy in the field, but all our partners and volunteers had to find safe ways to train and get out to job sites this year due to COVID-19, which required smaller crews or extra vehicles.

- We continue to focus on priority sites across the forest, including rock pits, timber sale areas, popular trails, recreation areas, vulnerable meadow habitats, riparian areas and lake shores.
- Collaborated with Energy Northwest to implement a new Invasive Species Management Plan for their new Packwood Hydro FERC license.
- Lewis County Weed Board partnered with Pacific Northwest Invasive Plant Council and Mt. Rainier National Park to offer a virtual Invasive ID training.
- Sponsored and worked with Washington Conservation Corps for five 8-eight-day tours, treating invasive plant populations across the Gifford Pinchot NF.
- Worked with the Spirit Lake project planning team to provide invasive plant control measures for projects in the Pumice Plain designated Research Area.
- Special treatment areas in 2020 include: Coldwater Lake, Hummocks Trail, and Johnson Ridge and all scenic visitor areas along the 99 road in Mount St. Helens National Volcanic Monument, a large meadow on the Green River Trail, three large meadows in the Goat Rocks and William O'Douglas Wilderness Areas (North Zone); herb-Robert (Geranium robertianum) treatment in Government Mineral Springs summer home tract, Trapper Creek Wilderness, Paradise Campground, Cedar Flats Research Natural Area, Smith Butte Research Natural Area, Lewis River trail. and 90 road and vicinity; meadows containing habitat for pale blue-eyed grass and mardon skipper butterfly (both sensitive species), Chelatchie Prairie within Sidalcea hirtipes habitat; and treatment of Phalaris arundinacea at Oregon spotted frog wetland (to improve habitat for this federally Threatened species).



Figure 1. Washington Conservation Corps working with FS to treat invasives in Mount St. Helens National Monument.

2020 Accomplishments

Invasive Plants Treated = 1,940 acres

Inventories - over 95 miles of road, 59 miles of trail, 7,000 acres of forest, 500 acres in Mount St. Helens National Volcanic Monument and about a 200-acre survey of the Packwood Lake hydro project area.

Monitoring: 1,669 acres

Funding

Partnership funding = \$235,854

Rocky Mountain Elk Foundation = \$20,000

Partners/Cooperators: Cowlitz, Klickitat, Lewis and Skamania County Weed Boards, Washington Conservation Corps, Mount St. Helens Institute, Cascade Forest Conservancy, Pacific Northwest Citizen Science, Columbia River Gorge Cooperative Weed Management Area, Backcountry Horsemen, and Government Mineral Springs homeowners

Gifford Pinchot National Forest, 987 McClellan Road, Vancouver, WA 98661 | Contacts: Brad Krieckhaus, NZ Botanist, 360-497-1164; Andrea Montgomery, SZ Botanist, 509-395-3414; Evan Olson, SZ Botany Tech, 509-365-3413; Conner England, Program Manager, 360-891-5108.



Malheur National Forest

2020 Invasive Plant Accomplishments

- Treatment on more than 6,200 acres, primarily through chemical methods, the largest number of acres the Malheur has ever treated in one fiscal year.
- Manual/mechanical removal on 37 acres.
- 1,176 acres of survey and inventory.
- Biocontrol releases at eight locations across the forest.
- Established Canada thistle rust (*Puccinia punctiformis*) nursery site on Prairie City Ranger District.
- Conducted Canada thistle rust monitoring at three sites in partnership with Utah State University.
- Integrated weed management on 300 acres of wilderness.
- Began partnership with Harney County Cooperative Weed Management Area to focus on prevention of infestations at popular recreation sites.





Figure 1. Jessi Brunson, botanist, releases Cyphocleonus achates, a knapweed biocontrol.



Figure 2. Shaun Morrison, botany technician, monitors Canada thistle rust at a study site.



Figure 3.Botany technician Bets Reed conducts roadside herbicide control on Canada thistle in the Cow Fire area.

2020 Accomplishments

Invasive Plants Treated: 6,200 acres

Inventories: 1,176 acres Monitoring: 3,101 acres

Funding

Secure Rural Schools (Title II) - \$100,000

Agreements: \$38,000

Invasive Plant Base Program: \$90,000

Partners/Cooperators

Grant Soil & Water Conservation District, Harney County Weed Control, Harney County Cooperative Weed Management Area, Burns Paiute Tribe, Oregon Department of Agriculture, USDA Animal & Plant Health Inspection Service, Confederated Tribes of Warm Springs, Blue Mountains Forest Partners, Harney County Restoration Collaborative, Blue Mountains Biodiversity Project, Oregon Department of Transportation, private landowners and ranchers, Utah State University

Malheur National Forest, PO Box 909 / 431 Patterson Bridge Rd., John Day, OR 97845 | Contact: Jessi Brunson: Botanist, 541-575-3067; Lisa Foster: Emigrant Creek District Botanist, 541-573-4312; Joe Rausch: Veg Management Staff Officer, 541-575-3141



Mt. Baker-Snoqualmie National Forest

2020 Invasive Plant Accomplishments

- Treated 1,934 acres, up 38% from previous annual high. Monitored 1,231 acres and restored 904 acres.
- Recorded 171 new infestations including the Forest's first documented Houndstongue infestation.
- Partnered with Bonneville Power Administration to conduct treatments on 181 acres of infestations on the Skykomish and Snoqualmie Ranger Districts.
- Co-hosted two Weed Watcher/Citizen Science Invasive Plant Identification and Survey webinars with Pacific Northwest Invasive Plant Council, King Co. and Snohomish Co. Noxious Weed Control Boards.
- Employed Earthcorps on the Snoqualmie District to treat 72 acres of weeds prior to two Forest projects and the McCullough Seed Orchard.
- Skagit Fisheries Enhancement Group, King Co. and Snohomish Co. Noxious Weed Control Boards, and Sauk-Suiattle Indian Tribe treated 889 acres of knotweed in the Skykomish, Tye, Sauk, Suiattle, and Skagit Rivers.
- King Co. Noxious Weed Control Board treated 145 acres of hawkweeds, knapweeds, tansy ragwort, and dalmatian toadflax in the SF Snoqualmie River.
- Nooksack Salmon Enhancement contributed 113 hours of volunteer time pulling 3,400 lbs. of spotted Jewelweed in the North Fork Nooksack River Basin.
- The Invasive Species Program inspected 19 commercial rock pits for Invasive Species for potential use of their products on Forest projects.



Figure 1. Snoqualmie Point Park Before and After treatment of perennial pea, blackberry, and Scotch broom.



Figure 2.Kaaland Parcel on the Skagit River. Mechanical and herbicide treatments to treat blackberries and reed canarygrass. Assisted by the Whatcom Co. Corrections Crew.

2020 Accomplishments

Invasive Plants Treated = 1934 acres

Inventories = 171 new infestations

Monitoring = 1232 acres

Restored 904 acres

Partners/Cooperators

Bonneville Power Administration, Washington Dept. of Natural Resources, Earthcorps, Federal Highways, Noxious Weed Control Boards of King, Skagit, Snohomish, and Whatcom Counties, Mountains to Sound Greenway Trust, Nooksack Salmon Enhancement Group, Pacific Northwest Invasive Plant Council, Puget Sound Energy, Sauk-Suiattle Indian Tribe, Skagit Fisheries Enhancement Group, Snohomish Co. Public Works, Tacoma Watershed, Washington Conservation Corps, Whatcom Co. Corrections Crew

Mt. Baker-Snoqualmie National Forest, 2930 Wetmore Ave, Suite 3A, Everett, WA. 98021 | Contact: Jonathane Schmitt, Invasive Plants Specialist, 360-436-2309; Kevin James, Ecologist and Botany Program Manager, 425-783-6043.



Mt. Hood National Forest

2020 Invasive Plant Accomplishments

Mt. Hood National Forest completed another year of successful invasive plant management despite tumultuous events that unfolded in 2020. Even during a global pandemic and devastating wildfires in the Pacific Northwest, Mt. Hood staff and partners were able to meet target goals. Highlights of our accomplishments include:

- Clackamas Soil & Water Conservation District, Portland Water Bureau, Oregon Dept. of Agriculture and FS staff conducted treatments of orange and meadow hawkweed (*Hieracium aurantiacum*, *H.* caespitosum) within the Lolo Pass powerline corridor and surrounding areas.
- Detected and treated new sites of slender false brome and meadow knapweed.
- Walama Restoration Group partners removed houndstongue (*Cynoglossum officinale*) across 137 acres and conducted reed canarygrass (*Phalaris arundinacea*) removal in a dry meadow over two acres.
- Clackamas Soil & Water Conservation District conducted Armenian blackberry treatments on log decks to support the Fisheries program.
- Hood River Soil & Water Conservation District staff and contractors surveyed and handpulled garlic mustard (Alliaria petiolata) found on private land within one mile of the Forest Boundary through a Stewardship Agreement.
- Seasonal crews surveyed over 1,000 acres and mapped new invasive annual grass sites. Cooperative efforts ongoing with silviculture and fuels staff to plan for management of medusahead-rye (*Taeniatherum caputmedusae*) and ventenata grass (*Ventenata dubia*).



Figures 1 and 2. Medusahead rye infestations. Photos by C. Mead and S. Hall.



Figures 3 and 4. Surveys and treatment of meadow hawkweed by ODA, Clackamas SWCD and FS Staff. Photos by S. Hall.

2020 Accomplishments

Invasive Plants Treated = 2,047 acres

Inventories = 1,601 acres

Monitoring = 1,710 acres

Funding

Base Invasive Plant Program = \$ 100,000 Stewardship Contracting = \$457,418

Partners/Cooperators

Oregon Department of Agriculture; Oregon Department of Transportation; Wasco, Hood River, Clackamas, and Multnomah Counties; Clackamas, Hood River and Wasco Soil & Water Conservation Districts; Bonneville Power Administration; Portland General Electric; Portland Water Bureau; Columbia Gorge Cooperative Weed Management Area; 4-County Cooperative Weed Management Area; Walama Restoration Project

Mt. Hood National Forest, 16400 Champion Way, Sandy, OR 97055 | Contact: **Chad Atwood**, Terrestrial Program Manager 503-668-1668.



Ochoco National Forest and Crooked River Grassland 2020 Invasive Plant Accomplishments

The Invasive Plant program partners with all other natural resource program areas on the Ochoco National Forest and Crooked River Grassland to plan and implement resiliency projects of all types.

Recently Discovered on the Crooked River Grassland

 New weed species encountered on Lookout Mountain District this year was (*Cemtairea cyanus*, bachelor button).

Restoration

- We treated weeds in riparian restoration project areas in McKay and Little McKay Creeks.
- Conducted seeding and invasive plant treatments at Rager Ranger Station building demolition site to restore core sage grouse habitat.
- Treatment of invasive annual grasses to protect and restore habitat for Peck's penstemon, a Forest Service sensitive species.
- Invasive annual grass surveys and herbicide treatment occurred on 377 acres in partnership with Deschutes NF, Sisters Ranger District, Ochoco Wildlife, Portland General Electric and the Mule Deer Foundation.

Education and Outreach

 Generation Green internship position - the Invasive Plant Education Liaison - produced two comprehensive lesson plans that educators can use in classrooms and other conservation education settings.



Figure 1. Heart of Oregon AmeriCorps clean up Scull Hollow Campground.



Figure 2.HOC Americorps crew lead Matt Henrickson pulling houndstongue in Bridge Creek Wilderness.

2020 Accomplishments

Invasive Plants Treated = 3,980 acres

Inventories = 8.600 acres

Monitoring = 110 acres

Funding

Base Invasive Plant Program = \$ 56,663

Partnership funding = \$40,000

Partners/Cooperators

Crook County Weed Master, Grant County Soil & Water Conservation District, Heart of Oregon AmeriCorps, Central Oregon Youth Conservation Corps, Crooked River Weed Management Area, Discover Your Forest, Deschutes County Weed Board, Mule Deer Foundation, Portland General Electric, Jefferson County Weed Board

Ochoco National Forest and Crooked River Grassland, 3160 NE Third Street, Prineville, OR 97754 | Contact: Mike Crumrine, Invasive Plants Program Manager phone: 541-233-3146.



Okanogan-Wenatchee National Forest

2020 Invasive Plant Accomplishments

The Forest treated over 3,429 acres using herbicide, hand pulling, and biocontrol agents. Partnership funds for invasive plant treatments greatly increased accomplishment of priority work.

- The Chelan County Public Utilities District and Washington Dept. of Fish and Wildlife funded control of common houndstongue on the Entiat and Methow Ranger Districts.
- The Chelan County Noxious Weed Board and the Forest are partners in a multi year project to eradicate garden loosestrife from Fish Lake (on private/USFS land).
- The Twisp River Weed Warriors and the Kongsburger ski club controlled knapweed in partnership with the Methow Ranger District and the Cle Elum Ranger District, respectively.
- An education board about ventenata was installed on the Naches Ranger District.
- Interstate-90 corridor restoration and the Holden Mine Remediation projects funded invasive plant control within those project areas.
- The forest treated 30 acres of the orange hawkweed, which threatens valuable meadows.
- Range specialists and Wilderness rangers surveyed for invasive plants as part of their daily work.



Figure 1. Hector Rodriguez seeks and destroys houndstongue on the Entiat Ranger District as part of a project funded by the Chelan County Public Utilities District.



Figure 2. A contractor sprays garden loosestrife along Fish Lake, on the Wenatchee River District. The project is a partnership with Chelan County Noxious Weeds and is funded by a WA Department of Ecology grant.

2020 Accomplishments

Invasive Plants Treated = 3,429 acres Monitoring = 2,663 acres

External Funding

Secure Rural Schools (Title II) = \$141,363, External partnerships = \$3,889, Burned Area Emergency Rehab = \$10,530, Other Cooperative funding = \$33,000

Partners/Cooperators - Washington Dept. of Ecology Conservation Corps, Washington State Department of Agriculture, Washington State Noxious Weed Control Board, Chelan Co. Noxious Weed program, Chelan Co. Public Utitlities District, Washington Dept. of Fish & Wildlife, WSU Extension biocontrol program, Yakama Nation, Yakima Co., Washington State Dept. of Transportation, Kittitas Co. Weed Board, Kongsburger Ski Club, Mid-Columbia Fisheries, Bureau of Reclamation, Conservation Northwest, Twisp River Weed Warriors, Okanogan Co. Noxious Weed Board, Bonneville Power Administration, Washington Outdoor School

Okanogan-Wenatchee National Forest, 215 Melody Lane, Wenatchee, WA 98801 | Contact: Brigitte Ranne, Zone Botanist, brigitte.ranne@usda.gov; Helen Lau, District Botanist— helen.lau@usda.gov; Kelly Baraibar, District Botanist Kelly.Baraibar@usda.gov



Olympic National Forest

2020 Invasive Plant Accomplishments

In 2020, the Olympic National Forest successfully treated over 800 acres of weeds. About half of these were completed by two County Noxious Weed Control Boards; the other half was completed by a FS crew, with assistance from the Washington Conservation Corps. Funding sources used to complete work include: Secure Rural Schools (Title II), Knudsen-Vandenberg Act funds, and the Rocky Mountain Elk Foundation. Additional work was completed through several other partnerships. Highlights include:

- The Clallam Co. Noxious Weed Control Board and Backcountry Horsemen of Washington treated a 10acre Canada thistle infestation at Camp Handy (see Figure 1), a popular stock camp in the Buckhorn Wilderness.
- Focused treatments continue in the Dungeness River, Wynoochee, Calawah, Queets, Skokomish and Humptulips River watersheds to conduct both pre- and post-harvest weed treatments associated with timber sales.
- The Lake Quinault Recreational Residence Invasive Plant Treatment Project is being reinvigorated. Planning has been initiated with the Homeowner's Association to treat English laurel and English holly around the homes and surrounding forest of the recreational residence. Part of the project will also serve to educate and empower the homeowners to eradicate invasive plants and restore native vegetation. Treatments will be done by FS staff. The Homeoner's Association will be donating money to hire an EarthCorps crew to remove the standing dead material.



Figure 1. Canada thistle at Camp Handy in the Buckhorn Wilderness

- Funds from the Rocky Mountain Elk Foundation paid for 70 acres of treatments in the Dungeness River watershed. These treatments were focused on meadows and large openings, such as the Cranberry Bog Botanical Area, and at human maintained openings, such as Schmidt's Knob (see Figure 2). These treatments were completed in partnership with the Clallam Co. Noxious Weed Control Board and the Washington Conservation Corps.
- County and FS staff inspected and treated rock sources and gravel pits for weeds at 34 on-Forest and 39 off-Forest sites. Many of these quarries have been receiving annual treatments for several years, which is reflected in an overall reduction of infestations at these sites.
 Treating and inspecting off-Forest rock sources are not only a benefit to the Forest, but also the entire Olympic Peninsula. These inspections were largely funded through Title II of the Secure Rural Schools Act.



Figure 2. Treating Canada thistle at Schmidt's Knob with the WCC

2020 Accomplishments

Invasive Plants Treated = 846 Acres
Treatment Areas Monitored = 646 Acres

Partners/Cooperators

Clallam, Grays Harbor and Mason County Noxious Weed Control Boards, Washington Conservation Corps, Backcountry Horseman of Washington, Rocky Mountain Elk Foundation, 10,000 Years Institute, Quinault Homeowners Association

Olympic National Forest, 1835 Black Lake Blvd. SW, Olympia, WA 98512 | Contact: **Nick Jarvis**, Invasive Plants Program Coordinator, phone 360-956-2319; **Cheryl Bartlett**, Forest Botanist, 360-965-2283.



Rogue River-Siskiyou National Forest

2020 Invasive Plant Accomplishments

The invasive plant staff met their targets and objectives this year through hard work and cooperating with partner groups. The staff includes one Forest Botanist, two District Botanists and 13 seasonal Biology Technicians (Plants). Highlights of accomplishments include:

- Treated 1,940 acres of invasive plants (484 acres with herbicide and 1457 acres through manual/hand pulling).
- Surveyed and inventoried over 8,000 acres and over 800 miles of roads for invasive plant species.
- Continued a long-term partnership with the Oregon Department of Agriculture focused on spotted knapweed and biddy-biddy treatments.
- Continued Partnership with the Klamath National Forest to treat invasive plants on and off FS lands.
- Implemented invasive treatment as a component of an ongoing meadow restoration project utilizing force account and youth crews.
- Workforce Rogue Valley and College Dreams youth crews controlled invasive plants that were unintentionally introduced and spread from a stream restoration project.
- Northwest Youth Corp completed two weeks of invasive plant control on forest.
- A new partnership agreement with Coquille Watershed Association resulted in many Powers Ranger District treatments
- The Alyssum Working Group approached their goal of eradicating yellowtuft alyssum by further reducing existing populations. Partners include BLM, Oregon Department of Agriculture, The Nature Conservancy, and others.
- Botanists and Invasive Plant crews on the forest served as resource advisors and Burned Area Emergency Response team members assisting on wildland fire response and preventing the spread of weeds on the Slater Fire.



Figure 1. Worksource Rogue Valley and NYC crew.



Figure 2. Left: Treated scotch broom; Middle: yellowtuft alyssum Right: College Dream controlling invasive plants with black plastic

2020 Accomplishments

Invasive Plants Treated = 1,931 acres

Inventories = 8,000 acres surveyed for projects; 800 miles of road inventoried as part of targeted invasive plant surveys

Funding

Base Invasive Plant Program = \$286,476 Regional Priority Alyssum funds = \$40,000 Timber Sale Associated funding = \$169,178 Secure Rural Schools (Title II) = \$59,946 Partners Contributions = \$8,327

Total = \$563,927

Partners/Cooperators

BLM, Oregon Department of Agriculture, Workforce Rogue Valley, College Dreams, Northwest Youth Corp, Sek-wetsi, Coquille Watershed Association

Rogue River-Siskiyou National Forest, 3040 Biddle Road, Medford, OR 97504| Contact: Stu Osbrack, Forest Botanist, Medford, 541-618-2056; Kailey Clarno, District Botanist, Gold Beach/Powers, 541-247-3656; Dave Bowden District Botanist, Siskiyou Mountains RD, 541-899-3855



Siuslaw National Forest

2020 Invasive Plant Accomplishments

The Siuslaw Botany Program developed an Invasive Species Monitoring Plan for the newly designated Devil's Staircase Wilderness. Data collected will help determine a change in the amount of use in this remote location. Baseline data will be collected in 2021.

Botanists teamed up with Engineering staff to prioritize invasive species treatments in rock quarries (Figure 1). This planning effort will help staff clear and treat rock quarries two to three years prior to their use for timber sale road improvements, therefore limiting the spread of undesirable species.

Thanks to dedicated volunteers, seasonal employees, and permanent staff, 124 acres of Scotch broom and gorse were treated in Oregon Dunes National Recreational Area (Figure 2).

The Oregon Dunes Restoration Project analysis was completed, and the final Environmental Assessment issued in 2020. Implementation of this project includes a substantial effort to remove European beachgrass (*Ammophila arenaria*) from sand dune ecosystems in order to improve and restore ecological processes, native species and their habitats, and recreational conditions.



Figure 1. Privately owned rock quarry under consideration for future use.



Figure 2. Despite the pandemic, our dedicated volunteers continued weekend pulling parties at Heceta.

2020 Accomplishments

Invasive Plants Treated = 800 acres Areas surveyed = 2,500 acres Monitoring = 450 acre

Partners/Cooperators

Siuslaw Watershed Council, Mid-Coast Cooperative Weed Management Area, Oregon Dunes Cooperative Weed Management Area, Joshua Lane Weed Volunteers, Rocky Mountain Elk Foundation, Alliance for Recreation and Natural Areas, Institute for Applied Ecology, Marys Peak Alliance, Tillamook County Soil & Water Conservation District, Benton County Public Works, and Midcoast Watersheds Council

Siuslaw National Forest, 3200 SW Jefferson Way, Corvallis, OR 97332 | Contact: **Chelsea Monks**, Forest Botanist, 541-750-7130 **Armand Rebischke**, Restoration Botanist, 541-563-8419; **Matt Smith**, Restoration Botanist, 541-563-8425



Umatilla National Forest

2020 Invasive Plant Accomplishments

Most districts have an invasives plant coordinator who also has other duties (range manager or silviculture). In 2020, the Walla Walla District hired a new permanent seasonal biological technician dedicated to the invasives program.

Activities include:

- Treated 4,350 acres of invasive plants. Most was done with spot spraying of herbicides.
- All newly discovered populations of invasive plants were entered into the Forest Service database.
 Treatments were also entered into this database.
- Used Secure Rural Schools Title II funds to hire summer temporary invasive treatment crews, Youth Conservation Corps crews, and to provide funding to partners.
- Tri-county Weed Management Area treated meadow hawkweed along Phillips Creek, Lookingglass Creek, and in the Wenaha-Tucannon Wilderness.
- Oregon Department of Agriculture worked with Walla Walla Ranger District to treat common bugloss and rush skeleton-weed at Meacham floodplain restoration sites.



Figure 1. White bryony is a poisonous invasive plant recently found near Pomeroy Ranger District.



Figure 2. Walla Walla District staff with backpack sprayers.

2020 Accomplishments

Invasive Plant Acres Treated = 4,350 Inventories = 5,125 acres (botanical surveys) Monitoring = all treated areas

Funding

Base Invasive Plant Program = \$282,000 Secure Rural Schools (Title II) = \$38,206 Timber sale receipts = \$59,000 Total program funding = \$379,206

Partners/Cooperators

Asotin County, Confederated Tribes of the Umatilla Indian Reservation, Oregon Dept. of Agriculture; Tri-County Cooperative Weed Management Area; Grant, Union, Umatilla, Wheeler, and Wallowa Counties; Vale District BLM; Wallowa Resources, and Washington Dept. of Fish and Wildlife

Umatilla National Forest, 72510 Coyote Rd. Pendleton, OR 97801 | Contact: Headquarters: Paula Brooks, paula.j.brooks@usda.gov; Heppner RD: Tim Collins, tim.collins@usda.gov; N Fk John Day RD: Brad Lathrop, bradley.lathrop@usda.gov; Pomeroy RD: Chance Appleford, chance, Appleford@usda.gov; Walla Walla RD: Madelinn Schriver, Madelinn.Schriver@usda.gov



Umpqua National Forest

2020 Invasive Plant Accomplishments

The forest treated 2,850 acres in a most challenging year. **Herbicide:**

- Sixth year treating yellow floatingheart with imazapyr at Willow Sump (now reduced by 99%) and third year of treatments at Beaver Pond (Figure 1).
- Treated 200 acres of false brome with glyphosate and 600 acres of spotted knapweed with picloram.

Mechanical:

- Hiked 240 lbs. of ripe Canada thistle seed heads out of Rouge-Umpqua Divide Wilderness. Also treated Boulder Creek Wilderness.
- Northwest Youth Corps spent three days pulling English ivy and other species along the North Umpqua trail.
- As part of Pacific Power settlement agreement, treated Toketee Lake area, canal roads, & fore bays.
- Various other high priority sites re-treated.

New detections:

- First county record of orange hawkweed discovered on Forest compound, eradication attempted with digging and pulling (Figure 2).
- Found new *Ventenata dubia* sites on the forest.



Figure 1. Oregon Department of Agriculture preparing to treat Yellow floating heart at Beaver Pond.



Figure 2. Hieracium aurantiacum located as first county record.

2020 Accomplishments

Invasive Plants Treated =2,850 acres Inventories =600 newly surveyed acres Monitoring = 1,700

Partners/Cooperators

Coast Fork Willamette Watershed Council, Douglas County Soil & Water Conservation District, Douglas County Weed Board, Northwest Youth Corps, Oregon Department of Agriculture, Oregon Department of Fish & Wildlife, PacifiCorp, Phoenix Alternative High School

Umpqua National Forest, 2900 Northwest Stewart Parkway Roseburg, OR 97471 | Contact: **Amanda Hardman**, North Zone Botanist: 541-496-4148; **Crystal Shepherd**, South Zone Botanist: 541-825-3144.



Wallowa-Whitman National Forest

2020 Invasive Plant Accomplishments

Throughout the challenging 2020 year, the Wallowa-Whitman National Forest was able to maintain existing partnerships and implement projects. Accomplishments reflected are a result of strong partnerships and seasonal weed crews on the ground.

The forest filled three vacant permanent seasonal employee positions invasive plant program.

- Wilderness Stewardship funding continued for invasive plant inventory in Seven Devils Wilderness (year 3 of 3).
- Meadow hawkweed and leafy spurge partnership projects continue with the Tri-County Cooperative Weed Management Area.
- Eradication efforts for Turkish thistle (new invader to North America) on five new sites found and three acres treated in Oregon. Inventories performed in Idaho (Snake River).
- Medusahead rye restoration efforts included 47.5 new acres identified and treated and nine acres seeded.

Table 1. 2020 Top five, out of 35 invasive plants targeted for treatment.

Species	Acres Treated
Spotted knapweed	514
Whitetop	506
Diffuse knapweed	505
Rush skeletonweed	363
Canada thistle	245



Figure 1. Forest Service crew release Puccinia punctiformis, Canada thistle Rust fungus, in coordination with Oregon Department of Agriculture.



Figure 2. Upper Snake River Partnership Rush skeletonweed treatments.

2020 Accomplishments

Invasive Plants Treated = 3,267 acres (335 sites)

Partnership Acres = 376 acres

Volunteer Acres = 101 acres

Contract Acres = 58 acres

Monitoring = 285 sites monitored

Funding

Wilderness Stewardship Performance grant = \$6,000 Challenge Cost Share grant = \$29,000

Partners/Cooperators

Tri-County Coordinated Weed Management Area, Upper Burnt River Cooperative Weed Management Area, Baker Co. Soil & Water Conservation District, Baker Co.Weed Program, Union Co.Weed Program, Wallowa Resources, Wallowa Co.Vegetation Dept., Oregon Department of Agriculture, Permittees, Volunteers, Greater Hells Canyon Council, Wallowa County Pilots Association, Nez Perce Fisheries, Animal and Plant Health Inpection Service, BLM, permittees, and private landowners

Wallowa-Whitman National Forest, 1550 Dewey Ave, Suite A, Baker City, OR 97814 | Contact: **Beckijo Wall**, North Zone Inv. Plants, 541-426-5535; **Scott Schaefer**, South Zone Inv. Plants, 541-963-8550; **Maura Laverty**, Program Manager, 541-523-1286

Willamette National Forest 2020 Invasive Plant Accomplishments

Accomplishments

We treated 1,883 acres of weed infestations using manual and chemical treatments. Our partners at Oregon Department of Agriculture continue to be key in helping us treat and survey weeds across the Forest.

Accomplishments were down significantly due to COVID-19 and deferral of work to 2021.

Integrated Projects

- We partnered with the Aquatics program on McKenzie District on a Challenge Cost Share project where we are treating weeds in South Fork McKenzie Floodplain Restoration.
- On Sweet Home District, we pulled St. Johnswort and treated reed canarygrass in meadows as part of the Montane Meadow Enhancement Challenge Cost Share project.
- We completed planning and approvals to treat reed canarygrass in Mt. Jefferson Wilderness near Pamelia Lake on the Detroit Ranger District.
- We treated weeds in rare *Ophioglossum* habitat (three sites) on McKenzie River Ranger District.

Partnerships

- We completed surveys of trails in three Wilderness Areas with a Wilderness Stewardship Grant. We documented 39 weed populations in Three Sisters and Waldo Wildernesses and no weeds in Diamond Peak Wilderness.
- We collaborated with HJ Andrews Experimental Forest to conduct surveys and treatments.
- On the Sweet Home Ranger District we partnered with Linn County Youth Corrections Crew and Northwest Youth Corps to manually treat infestations.
- We used Stewardship contracting and Good Neighbor Authority along with our traditional timber receipts, Secure Rural Schools (Title II), and regular program funds to support the invasive plant program.



Figure 1. Middle Fork District Staff manually controlling medusahead rye to keep it from seeding in a meadow restoration project.

2020 Accomplishments

Invasive Plants Treated = 1,883 acres

Partners/Cooperators

Oregon Department of Agriculture; Northwest Youth Corps; HJ Andrews Experimental Forest, Oregon State University; Linn County Youth Corrections Crew; Deschutes NF

Willamette National Forest, 3106 Pierce Parkway, Suite D, Springfield, OR 97477 | Contact: Jennifer Lippert, Forest Botanist, phone 541-225-6440.