

Forest Service

Pacific Northwest Region



Invasive Plants

Program Accomplishments



Eradicating the Aquatic "Class A" Noxious Weed Yellow Floating Heart with bottom barrier installation

Fiscal Year 2012

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Pacific Northwest Region

2012 NFS Invasive Plant Accomplishments

The Pacific Northwest Region experienced substantial challenges managing invasive plants in FY 2012. Despite these challenges, we were able to treat 52,968 acres using 20 different funding codes.

Other Regional highlights include:

- Completing another invasive plant EIS and Record of Decision covering two forests (Deschutes and Ochoco).
- Invasive European beachgrass (*Ammophila arenaria*) was chemically treated to improve nesting habitat for threatened western snowy plover. Anticipated results are reduced cost and increased effectiveness compared to past mechanical treatments.
- Treated invasive plants in meadows to benefit Mardon Skipper butterfly, a candidate for listing under the Endangered Species Act, with the US Fish and Wildlife Service and other partners.
- Surveyed more than 20 waterbodies for aquatic invasive species. One site of Eurasian watermilfoil was confirmed through DNA analysis.
- Cooperated with over 130 different partners.
- Worked with the High Desert Museum on the display *Invasive Pervasives*, which reached 155,000 visitors.
- Cooperated with the Pacific Northwest Invasive Plant Council EDRR program to have high priority trails surveyed by trained volunteers.



Figure 1. Learning about reed canarygrass (*Phalaris arundinaceae*).



Figure 2. Dalmatian toadflax (*Linaria dalmatica*) and biocontrol, toadflax stem weevil (*Mecinus janthinus*, inset)

- Observed significant eradications and reductions of Dalmatian toadflax infestations (> 98% reduction) in several Oregon forests due to the release and spread of the bio-control, *Mecinus janthinus*.
- Surveyed 2,755 acres and treated 91 infestations of yellowtuft alyssum, a new invasive in North America, totaling 140 acres.
- Presented our Regional Invasive Plant Manager of the Year award to Barbara Mumblo on the Rogue River-Siskiyou NF.

Challenges

- Budget reductions
- 2012 had a late, wet spring and cool temperatures, shortening the treatment season, and road washouts prevented access to sites.
- Plans continue for extensive planting of *Arundo donax* for biofuel in Oregon.
- The court found that the Wallow-Whitman had done an inadequate analysis of cumulative effects and we will have to issue a Supplemental EIS.

Contact: Shawna L. Bautista, 503-808-2697



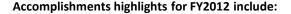
Pacific Northwest Region Natural Resources PO Box 3623 Portland, OR 97208

Pacific Northwest Region

2012 State & Private Invasive Plant Accomplishments

Region 6 has excellent relationships with our State and private partners when it comes to invasive plant work and 2012 was another very successful year.

Our primary partners for Forest Health Protection invasive plant funding are the Oregon and Washington Departments of Agriculture, and the Oregon Department of Forestry. In addition, we partner with Deschutes County in Oregon. Our cooperative work allows efficient treatment, survey, inventory, education and outreach activities to benefit the lands and citizens of both states as well as nearby National Forest System lands. Treatments of existing infestations are conducted across ownership boundaries, resulting in effective management of the weed populations.



Deschutes County

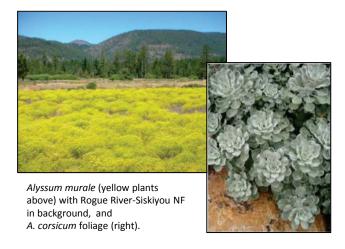
• Conducted 29inspections totaling 2,454 acres of hay and straw fields, allowing growers to obtain "weed free" certification.

Washington Department of Agriculture

- Supported Noxious Weed Control Boards in 8 counties.
- Treated all knotweed sites in Franklin County and all known yellow starthistle sites in Chelan County.
- Supported the Washington Invasive Species Council.
- Supported statewide biocontrol program including release and monitoring of biocontrol agents.
- Supported early detection / rapid response efforts in four counties.
- Developed and printed 5 new EDRR postcards.



Jennifer Andreas, WSU Extension, inspecting biocontrols on Dalmatian toadflax.



Oregon Department of Agriculture

- Updated the "WeedMapper" online database.
- Supported statewide biocontrol program, including release and monitoring of biocontrol agents and studies on new agents.
- Supported the statewide weed free forage program which certified 3,191 acres of hay and straw.
- Conducted 97 monitoring activities and 58 treatment projects.
- Conducted 57 education and outreach activities.
- Supported the Oregon Invasive Species Council.
- Continued support for eradication efforts on a new invader to North America, *Alyssum corsicum*, and its close ally, *A. murale* in southern Oregon.

Oregon Department of Forestry

• Treated approximately 342 acres of noxious weeds on forest lands in western Oregon.

Contact: Shawna L. Bautista, 503-808-2697



Pacific Northwest Region Natural Resources PO Box 3623 Portland, OR 97208

Columbia River Gorge National Scenic Area

2012 Invasive Plant Accomplishments

Highlights for invasive plants work include:

Balfour/Klickitat, Collins Slide and other restoration efforts continue to have weed control work completed to ensure native planting success and to control knotweed and other key weeds. Some of this work is in critical western pond turtle habitat. These efforts include over 80 acres.

Six counties within the CRGNSA continue to work collaboratively with us to control weed infestations at various locations throughout the Gorge. Funding for this work comes through RAC, from state grants and from NFVW and WF. Several partnerships are critical, such as with WIPA and EMSWCD. These efforts are addressing infestations of Garlic Mustard, lvy, and False brome to name a few.

The Columbia Gorge Cooperative Weed Management Area implemented a very successful Early Detection / Rapid Response project. The result was the protection of sensitive habitats on state, local and federal land by reporting existing weed data to a single database, inventorying 40 priority sites, holding four "Weed Watcher" trainings and installing boot brushes and signs at 25 key trailheads. This project was even featured on Oregon Field Guide:

www.opb.org/programs/ofg/segments/view/1836

Contact:

Robin Dobson: 541-308-1717 Mark Kreiter:541-308-1744 and/or Brett Carre: 541-308-1718



Figure 1. Example of a boot brush station and sign along a trailhead to reduce transport of weed seeds to uninfested areas.

2012 Accomplishments

| Acres | Fund Code | Activity |
|-------|-----------------|--------------|
| 500+ | NFXF | Restoration |
| 45 | NFWF | Restoration |
| 65 | NFVW | Weed Control |
| 110 | NFVW HF SPS4 | Restoration |

Partners/Cooperators

COE, BPA, WDFW, FOG, Ashcreek Forest Mgt, LCEP, OR State, CGEI, WIPA, EMSWCD, and 5 (Skamania, Klickitat, Wasco, Multnomah, Hood River) counties.



Columbia River Gorge NSA 902 Wasco Ave., Suite 200 Hood River, OR 97031

Deschutes National Forest

2012 Invasive Plant Accomplishments

The Deschutes NF Invasive Plant Program had a very successful year. Control, surveying, and working with partners remain the emphasis.

Highlights include:

- Signed a Record of Decision for *Invasive Plant Treatment*, an integrated treatment project which includes the use of herbicides and early detection/rapid response. Began implementation in September, completing 697 acres of invasive plant control using herbicide.
- Conducted surveys on 14 waterbodies throughout Central Oregon for aquatic invasive species. One site of Eurasian watermilfoil were confirmed through DNA analysis.
- Volunteers contributed 1,298 hours surveying and controlling noxious weed infestations, and revegetating disturbed areas to prevent noxious weeds.
- Worked with the High Desert Museum on the display *Invasive Pervasives*, which reached 155,000 visitors.
- 78 acres were seeded with native plants to prevent noxious weed establishment.
- 5,525 acres and 90 miles of weed surveys were completed on roadsides, wildfires, and project areas.
- Approximately 492 people were reached through 39 hours of public meetings, trainings, and field trips.
- Implemented an integrated strategy to control/contain 6,094 acres of invasive plants; including: 1,928 acres with herbicide; 4,166 ac manual; 0.1 ac solarization of orange hawkweed.



Volunteers plant native species to prevent noxious weed invasion (National Public Lands Day)



Desiree Johnson is suited up for aquatic invasive surveys

2012 Accomplishments

Acres treated = 6,094

USFS Invasives funding = 4,862 ac.

Title II = 341 ac.

Collaborative Forest Landscape Restoration = 847 ac.

Other USFS funding = 44 ac.

Total Funding = \$275,977

USFS Invasives funding = \$192,390

Title II = \$50,304

Collaborative Forest Landscape Restoration = \$28,000

Other USFS funding = \$5,800

Partners/Cooperators

Gilchrist School, Rosland Elementary, Wolftree, LaPine
Elementary School, Northwest Youth Corps, Youth Conservation
Corps, Heart of Oregon Corps/Americorps, National Forest
Foundation, Deschutes County Sheriff's Office, Deschutes
County Weed Board, Camp Sherman Weed Warriors, Earthwood
Homes, City of Sisters, High Desert Museum, Sisters High
School, Youth National Guard, Friends of the Metolius, Crooked
River WMA, Oregon Department of Agriculture, Jefferson
County, Deschutes County, Oregon Department of
Transportation.



Debra Mafera, Invasive Plant Program Manager (541.416.6588); Maret Pajutee, Sisters RD (541.549.7727); Christina Veverka, Crescent RD (541.433.3234); Marlo Fisher, Bend/Ft. Rock RD (541.383.4743)



Deschutes National Forest 63095 Deschutes Market Rd Bend, OR 97701

Fremont-Winema National Forests

2012 Invasive Plant Accomplishments

Accomplishment highlights include:

Cooperative Projects:

- Treatment of FS and private lands on Winter Rim, Augur Meadow, Clover Flat, and Thomas Creek vicinity with the Lake County CWMA.
- Provided employment for 1 Integral Youth Services crew while treating 545.2 acres.
- Through an agreement with Lake County CWMA:
 - Multiple medusahead sites on NFS lands within the vicinity of other cooperative projects on private lands were surveyed and prepped for treatment in 2013.
 - Aerial survey for leafy spurge, medusahead, and musk thistle around the Goodlow Mountain RNA will be completed in 2013.

Treatment:

- Continued use of herbicide ID/IQ contract and agreement with Klamath County for herbicide application. Treated 1,149.3 acres with herbicide.
- Treated 860.9 acres manually through the use of force account crews.
- 216 new infestations discovered.
- 1,075 previously treated sites "inactive" in 2012.

Prevention:

- Provided input to 9 planning projects and 1 BAER report.
- Implemented prevention measures during underburn and timber sale projects.
- Inspected 32 pits/quarries.
- Surveyed 927 acres prior to timber sale implementation and approximately 3,300 acres for new sites.



Figure 1. Force account crews performing manual control on musk thistle within the 2002 Winter Fire.

2012 Accomplishments

NFXN

| Acres | Fund Code | Activity |
|---------|-----------|----------------------|
| 1,214.3 | SRS2 | Title II |
| 1,028.5 | NFVW | Base Program |
| 276.2 | CFLN | Collaborative Forest |

2,555.4 TOTAL

36.4

Partners/Cooperators

ODA, Klamath County, Integral Youth Services, Lake County CWMA, Mule Deer Foundation.

Contacts: Lucas Phillips – 541-947-6251 Missy Anderson – 541-783-4085 Jeannette Wilson – 541-576-7593



Grants (Mule Deer Foundation)

Ruby Pipeline

1301 S. G Street Lakeview, OR 97630

Gifford Pinchot National Forest

2012 Invasive Plant Accomplishments

Invasive Plant Target Accomplishments:

2012 was the biggest year ever in controlling invasive plants. District Weed Coordinators did an outstanding job of treating infestations and working with partners. We treated a total of 8,238 acres implementing our site specific EIS on the forest, 2,965 acres of chemical treatment and 5,273 acres of manual treatment.

Education and Outreach: A variety of events, and field visits reached more than 4,500 people.

Events included:

- Weed rodeo at Mt St Helens National Volcanic Monument.
- Invasive information at Sturgeon Festival, Get Outdoors Day, Old Apple Festival, Earth Day, Portland Sportsman Show, Cowlitz Valley fishing Day, and Mt. Adams Fishing Day 2000 people.
- Created Invasive Information Boards at forest and district offices, recreation sites and trailheads - 2500 people.

Invasive Plant Surveys:

• 6,000 acres were monitored within treatment areas.

Additional forest projects:

- Integrated project on the Muddy River utilized partner support from Mt St Helens Institute and Skamania County to control Scotch broom in the Muddy River watershed.
- Invasive treatment at Wind River Nursery Fields with Rocky Mountain Elk Foundation funding improved elk forage.
- Invasive treatments in meadows to benefit Mardon Skipper with US Fish and Wildlife Service, Skamania County and Klickitat County weed groups to treat invasives at Cave Creek , Lost Meadows and Lost Creek meadows.

The invasive staff participated in the 10 year Wilderness Challenge.

The district invasive leads created and implemented teaching module for Wilderness Invasive plant survey team and completed the specialist input / report for the Wilderness Information Needs assessment . A survey crew completed a survey on the major trails and heavy dispersed use areas in 7 wildernesses.

Initiated treatment of English holly at Cowlitz Valley admin sites that was spreading into the Forest.

Cooperated with the Nisqually River CWMA, Pierce County
Conservation District, and White Pass School District to send Cowlitz
Valley Discovery Teams to help with **knotweed bending**, in
preparation for herbicide treatment, on previously untreated
infested areas of the Nisqually watershed.

Identified a **new invasive species of hawkweed**, *Hieracium murorum*, not previously found on the Forest, in the Nisqually watershed.

Coordinated lake survey on high use lakes by the aquatics and terrestrial groups. No aquatic invasive were found.



RMEF Mouse eared hawkweed survey, Toutle River, Mt St Helens National Monument

2012 Accomplishments

| Expenditures: | \$ 398,049 Total Funding |
|---------------|--------------------------------|
| \$ 157,000 | Base Program (NFVW) |
| \$ 53,000 | Timber Sale Collections (CWKV) |
| \$ 182,149 | Title II (RAC) |
| \$ 4,400 | US Fish & Wildlife |
| \$ 1.600 | Rocky Mountain Elk Foundation |

Partners/Contractors/Coop: Mt St Helens Institute, Rocky Mountain Elk Foundation, US Fish and Wildlife Service, Gifford Pinchot Task Force, Cowlitz, Pierce, Lewis, Skamania and Klickitat Counties Weed Control; Washington Department of Transportation, Cowlitz Valley Discovery Team, White Pass School District, Nisqually River CWMA.

Contacts:

Carol Chandler, Invasive Program Manager 360-891-5106; Linda Swartz North Zone Invasive lead, 360-497-1164; Andrea Ruchty South Zone Invasive lead 509-395-3414; Jennifer Deshong South Zone Tech; Ken Meyer Data Steward 360-891-5013



Gifford Pinchot National Forest 10600 NE 51st Circle Vancouver, WA 98682

Malheur National Forest

2012 Invasive Plant Accomplishments

Accomplishment highlights include:

- Treated 39 acres from 95 infestations with mechanical treatment (mowing/ pulling/ grubbing); completed by Forest Service personnel and partners.
- Monitored 34 acres from 93 infestations to determine effectiveness of recent mechanical treatments.
- Continued to make substantial progress on the Invasive Plant EIS effort with TEAMS Enterprise.
- Updated and completely reanalyzed the Forestwide inventory of invasive plants: over 2000 acres across 3000 sites were reanalyzed for the EIS effort.
- Observed significant eradications and reductions of Dalmatian toadflax infestations (> 98% reduction) across the Forest and adjacent areas due to the release and spread of the biocontrol, *Mecinus janthinus* (Figure 1).

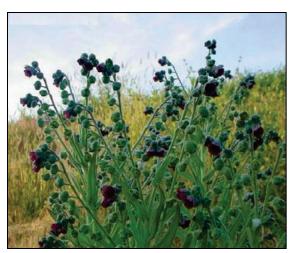


Figure 2. Houndstongue (Cynoglossum officinale), a significant invasive plant on the Malheur NF.



Figure 1. Dalmatian toadflax (*Linaria dalmatica*) and bio-control, toadflax stem weevil (*Mecinus janthinus*, inset)

2012 Accomplishments

| <u>Acres</u> | <u>Fund Code</u> | <u>Activity</u> |
|--------------|------------------|--|
| 39 | NFVW | Mechanical treatments of invasive plants |
| 34 | NFVW | Monitoring of invasive plant treatments |

Partners/Cooperators: Confederated Tribes of Warm Springs, Harney County, The Nature Conservancy, Oregon Department of Agriculture, Oregon Department of Transportation.

Contact: Joseph Rausch 541-575-3141



Malheur National Forest 431 Patterson Bridge Road P.O. Box 909 John Day, OR 97845

Mt. Baker-Snoqualmie National Forest

2012 Invasive Plant Accomplishments

Accomplishment highlights include:

- Mt. Baker-Snoqualmie National Forest treated and accomplished in FACTS 2,134.5 acres, primarily accomplished through the work of partners listed here and the addition of a new seasonal invasive plant biological technician.
- 55% of the treated acres were monitored in 2012 and monitored sites had an average control efficacy of 86%.
- Volunteers contributed over 2,567 hours controlling, surveying and mapping noxious weed infestations and conducting site restoration (Figure 1 and Figure 2).
- Outreach projects and presentations engaged 386 youth and adults.
- Adopted survey protocol and continued inspection of FS and commercial stockpiles/quarries, in conjunction with county weed staff, and assessed for weed-free status.
- Continued Invasive Plant Treatment NEPA EIS.
- Achieved approximately 83% control of knotweed species from FY11 within Glacier Creek and Upper Nooksack River on the Mt. Baker Ranger District. All sites re-treated in FY12, including more miles surveyed this year than any other since start of project.
- 86% of all knotweed patches within Sauk River (Skagit Wild and Scenic River system) have been eliminated, protecting 1,813 acres of floodplain in the upper basin on the Darrington Ranger District. 40% reduction of new patches detected in FY12.



Figure 1. North American Packgoat Association after a day of pulling and eating spotted knapweed at Ranger Creek Airstrip.



Figure 2. Northwest Youth Corps pulling weeds in Wild Sky Wilderness.

2012 Accomplishments

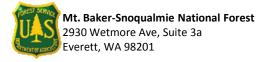
Acres Treated = 2,134.5NFVW = 657.2 acres, CMRD = 58 acres, CWKV = 41.4 acres, CONT = 620.2 acres, SRS2 (RAC) = 720.7 acres, and OFED = 36 acres.

Partners and Cooperators

Whatcom, Skagit, Snohomish, King, Pierce, and Kittitas County
Noxious Weed Boards, Washington State Department of
Transportation, WSU integrated Weed Control Project, Skagit Fisheries
Enhancement Group, Mountains to Sound Greenway Trust, Puget
Sound Energy, InterIM WILD program, Middle Fork Snoqualmie and
Alpine Lakes Wilderness Weed Watchers, Ryther Group, Washington
Department of Natural Resources, Northwest Youth Corps, North
American Packgoat Association, The Mountaineers, National Forest
Foundation, Seattle Parks and Recreation Outdoor Opportunities,
Skagit River System Cooperative.

Contacts:

Sarah Callaghan, Forest Invasive Plant Specialist 425-783-6042 Laura Potash, Botany Program Manager 425-783-6043 Shauna Hee, North Zone Botanist 425-854-2635



Mt. Hood National Forest

2012 Invasive Plant Accomplishments

In 2012, the Mt. Hood National Forest successfully implemented its fifth year of noxious weed treatment and prevention since signing the *Site-Specific Invasive Plant Treatments* FEIS in March 2008.

Accomplishment highlights include:

- Treatment of Japanese knotweed, orange hawkweed, spotted & diffuse knapweed by state-certified herbicide applicators under formal Agreements with three cooperators.
- Second year of multi-agency coordinated response to Garlic mustard found within one mile of the Forest Boundary.
- Noxious weed surveys and treatment conducted on roads scheduled for decommissioning.
- Invasive plant displays at county fairs and Ranger District open houses.
- Environmental education in conjunction with hand removal of noxious weeds with Youth Conservation Corps (YCC), Northwest Service Academy, Portland Urban League, Catlin Gable school, and other local school students.
- Major survey/treatment effort by ODA to control orange hawkweed (*Hieracium aurantiacum*) near Lolo Pass.



Figure 1. FS employee removes Spotted Knapweed (Centaurea maculosa) from a riparian restoration area. (photo by L. Cartwright)



Figure 2. Mt. Hood National Forest employee treating Orange Hawkweed (*Hieracium aurantiacum*), 2012 (*photo by C.Wesseler*).

2012 Accomplishments

| Acres | Fund Code | Activity |
|-------|-----------|--------------------------|
| 881 | NFVW | Invasive plant treatment |
| 231 | SRS2 | Title II funding |
| 20 | CWKV | Invasive plant treatment |
| 90 | SSCC | Retained receipts |
| 34 | WFHF | CCS funding |
| 1,256 | TOTAL | Weed Acres treated |

Partners/Cooperators:

Oregon Department of Agriculture; Oregon Department of Transportation; Wasco, Hood River, Clackamas, and Multnomah Counties; Hood River SWCD; Sandy River Basin Watershed Council; Portland Water Bureau; Columbia Gorge Cooperative Weed Management Area.

Contacts:

Linda Cartwright (541) 467-5113 David Lebo (503) 622-3191



Mt. Hood National Forest 16400 Champion Way Sandy, OR 97055

Ochoco National Forest and Crooked River National Grassland 2012 Invasive Plant Accomplishments

The Ochoco National Forest and Crooked River National Grassland Invasive Plant Program had a very successful year. Highlights include:

- Signed a Record of Decision for *Invasive Plant Treatment*, an integrated treatment project which includes the use of herbicides and early detection/rapid response. Began implementation in September, completing 114 acres of invasive plant control using herbicide.
- Accomplished 97 acres of revegetation using native species for invasive plant prevention.
- Educational programs Over 300 people were reached through 59 hours of public meetings, events, educational programs, and field trips.
- Volunteers put in 66 hours controlling noxious weed infestations, surveying, and setting up monitoring plots.
- Implemented an integrated strategy to control/contain 4,258 acres of invasive plants. Methods included:
 - 2,312 ac of herbicide control
 - 30 ac with biocontrol agents
 - 1,916 ac manual control
 - 70 ac and 39 miles of invasive plant survey



Learning about reed canarygrass (Phalaris arundinaceae)

Contacts:

Debra Mafera, Invasive Plant Program Manager, 541-416-6588 Krista Lopez, Paulina RD, 541-416-6635 Mark Lesko, Lookout Mountain RD & Crooked River NG, 541-416-6416



Medusahead removal from The Island Research Natural Area, Crooked River National Grassland

2012 Accomplishments

| Fund Type | Funding | Acres Accomplished |
|-----------------|-----------|-----------------------|
| USFS funding | \$153,856 | 3,173.2 |
| Title II | \$ 50,628 | 864.1 |
| Partner funding | \$ 5,000 | 61.6 |
| Other USFS | \$ 20,731 | 65.9 |
| Contributed | \$ 0 | 93 |
| Total | \$230,215 | 4,257.8 |

Partners/Cooperators

Northwest Youth Corps, Redmond Proficiency Academy, Friends and Neighbors of the Deschutes, Youth Conservation Corps, Rocky Mountain Elk Foundation, Blue Mountain Elk Initiative, Heart of Oregon Corps, Jefferson County Community Justice, Wheeler SWCD, Crook County Weed Control, Oregon Department of Agriculture, Jefferson County Weed Control, Grant SWCD, Crooked River Weed Management Area, Oregon Department of Transportation, Bureau of Reclamation, Western Federal Lands Highway Division, Western Wildland Environmental Threat Assessment Center



Ochoco National Forest 3160 NE 3rd St. Prineville, OR 97754

Crooked River National Grassland 813 SW Highway 97 Madras, OR 97741

Olympic National Forest

2012 Invasive Plant Accomplishments

In 2012, the Olympic National Forest successfully treated a total of 867 acres of weeds on the Forest, which is over 140% of target. Over two-thirds of these acres were accomplished with Title II funds, with almost all of the actual treatments being done by our four County Weed Boards.

Other accomplishment highlights include:

- Inventoried over 65 recreation residence lots in the Quinault area of the Forest for weeds, and contacted each cabin owner regarding weeds on their lots and what to do about them. Treated highest priority weed species on the lots. Inventory, outreach, and treatments were funded by Title II.
- Continued reed canary grass eradication efforts at the Pine Lake restoration site, including removal of almost an acres worth of landscape fabric which had been installed two years ago. Completed two separate herbicide treatments, and planted 10,500 graminoid plugs and 2000 live willow stakes. Project funded by Title II in FY12.
- Inventoried 20 rock pits, and completed 28 separate treatments at rock sources throughout the Forest. A total of 45 acres were treated in rock pits, which was funded by NFMG in FY12.
- Contractor treated 19 acres adjacent to planned pre-commercial thin projects that were heavily infested with everlasting peavine.
- Weed eradication and restoration efforts continue at Cranberry Bog Botanical Area.
- Treated a large infestation of Canada thistle in a series of meadows in the Buckhorn Wilderness. This treatment was completed by Clallam County and Olympic NF staff, and the Backcountry Horsemen.



Figure 1. WCC removing landscape fabric at Pine Lake. All bare ground shown in photo was previously occupied by reed canary grass at almost 100% cover. Live willow stakes planted last year are in foreground.

Contacts:

Susan Piper, Wildlife, Botany and Invasive Plant Program Manager, (360) 956-2435 Cheryl Bartlett, Botanist and Invasive Plant Program Coordinator, (360) 956-2283



Figure 2. Knotweed at a recreation residence lot at Lake Ouinault

2012 Accomplishments

| Acres | Fund Code | Activity |
|-------|-----------|----------------------------|
| 599 | SRS2 | Title II |
| 166 | CMLG | Road Decommissioning |
| 45 | NFMG | Rock Pits |
| 32 | CWKV | Timber Sales |
| 19 | NFVW | PCT Peavine Eradication |
| 6 | NFWF | Cranberry Bog |
| | | |

867 acres TOTAL

Partners/Cooperators

Clallam, Jefferson, Mason and Grays Harbor Counties Noxious Weed Control Boards; Washington Conservation Corps; Quinault and Skokomish Tribes; Skokomish Watershed Action Team, Backcountry Horsemen of Washington.



Okanogan-Wenatchee National Forest

2012 Invasive Plant Accomplishments

This year was particularly challenging with the late, wet spring and cool temperatures, and road washouts preventing access to sites, and yet we accomplished a tremendous amount of work.

Oka-Wen National Forest Invasives EIS: IDT compiling the Draft EIS for completion in early 2013. ROD in late spring 2013.

· 2012 Invasives Treatments

- 5.786 acres of herbicide treatments.
- 198 acres of manual control, principally handpulling low density invasive plant infestations.
- · Biological controls placed on Dalmatian toadflax .
- · Invasives Inventories
- 9,250 acres, 61 road miles , and 9 miles of BPA powerline corridors were inventoried for the occurrence of priority invasive plants and new invaders.

Invasive Species Monitoring

 Post-treatment effectiveness monitoring was completed on more than 50% of herbicide treated acres and manually treated areas.

Invasive Plant Prevention and Rehabilitation

- Approximately 86 acres of seeding for ecosystem restoration purposes (mostly decommissioned roads and mine reclamation) as well as prevention of recurring invasive populations.
- 2 rock quarries, private and NFS lands, were inspected and certified as weed-free.
- District invasives coordinators worked with partners, stakeholders, and public agencies to implement Cooperative Weed Management Areas and International Cooperatives for aquatic weeds.
- Gold Creek pond rehab planting 7000 native plants with 3 work parties of 35 adults and 60 youth.

NRIS INV Data Management & FACTS

 $\bullet\,$ All data was entered into FACTS. The new NRIS/FACTS interface was taking too long.

CWMAs

- The USFWS joined the Upper Yakima CWMA.
- The power line corridor was mapped for invasives.
- New areas and trails were mapped.

Education

- Joint program with WSU. Biological control program for 25 high school students and 100 elementary school students.
- Invasive plant education & pulled Oxeye Daisy with 60 Ryther's students from Seattle.

Weed Free Feed Education/Certification

- Inspected and certified 5 fields for certified Weed Free Feed for Permittee, BCH and Public use.
- Made frequent public contacts to educate on Weed Free Feed requirements

Recommendations:

 Continue use of contracts, especially smaller local personal services contracts, RAC projects, and CWMA projects. Without these opportunities, our target would not be reached.



Figure 1. Cle Elum Ranger District new spray equipment .

Year Awarded/Allocated: FY2012

Expenditures \$ 704,740 Total

Base Program (NFVW) \$332,000

Timber Sale Collections (CWKV) \$1,500

Title II (SRS2) \$246,000

Others: Wildlife & Fish (NFWF), State & Private (SPFH)

Partners: Chelan County Noxious Weed Board, Washington State Noxious Weed Board, Washington State Department of Agriculture, Okanogan County Weed Board, private landowners, WSDOT, Kittitas County Noxious Weed Board, King County Weed Board, MBS NF, Mtns to Sound Greenway, Iron Horse State Park, Washington Department of Fish and Wildlife, Bonneville Power Administration, Upper Yakima Watershed CWMA, Yakima County Weed Board, WSU, Conservation Northwest, and Washington State Dept. of Wildlife.

Contact: Maura Laverty, Ph: 509-664-9384



Okanogan-Wenatchee National Forest 215 Melody Lane Wenatchee, WA 98801 509-664-9200

Rogue River-Siskiyou National Forest

2012 Invasive Plant Accomplishments

Total acres treated for invasive plants on administrative sites, forest and range lands, meadows, road and river corridors, recreation sites, lakes, and rock quarries.

- · 920 acres treated manually and mechanically
- 10 acres treated with biocontrols
- 1,047 acres treated with herbicides

Treatment highlights include:

- Treated 91 infestations of yellowtuft, totaling 140 acres.
- 15 acres of Yellow Starthistle and 12 acres of Rose Campion removed in the Wild Rogue Wilderness.
- 6 acres of Purple Loosestrife treated with bio-control agents released on the Rogue River.
- 255 acres of Himalayan blackberry treated in meadows and rangeland.
- 2 acres of English ivy removed by NYC from the banks of the Elk River
- Plastic mulch removed and native grasses planted on 40 inactive weed infestations.
- 1+ acres manual eradication of yellow floating heart (a Class A Aquatic Noxious Weed) from a popular recreation lake on the Siskiyou Mountains Zone

Education and Prevention highlights include:

- Invasive plants information display and staffing at the OSU Land Steward Workshop, OSU Tree School, Buncom Day, Let's Pull Together Event
- Invasive plants presentations at several public events and venues.
- Inventoried gravel pits/quarries on federal and private lands
- Installed noxious weed road signs with assistance from the Jackson County CWMA.
- Surveyed 2,755 acres for yellowtuft alyssum on lands of mixed ownership in Josephine County. Yellowtuft prevention and detection coordination with cooperators.



Figure 1. Sowing native grass seed over previously mulched weed infestation.



Figure 2. Noxious weed prevention sign on Siskiyou Mountains Zone.



Figure 3. Eradicating the Aquatic "Class A" Noxious Weed *Yellow Floating Heart*

2012 Accomplishment and Expenditure Summary

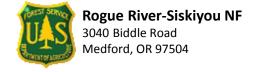
| Fund Code | Acres |
|---------------------|-------|
| Base Program (NFVW) | 893 |
| Title II (SRS2) | 619 |
| Timber Sales (CWKV) | 140 |
| Partners | 325 |
| Total | 1,977 |

Expenditures:

NFVW \$233,000, RAC funding \$115,000, CWKV \$40,000.

Partners/Cooperators:

BLM, USFWS, USFS Pacific NW Research Station, The Nature Conservancy, CWMA (Jackson, Josephine, and Siskiyou), Upper Rogue Watershed Council, GE Forestry, J Raymond Forestry, MSM Forestry, Curry County Weed Board, Coos County Corrections Crew, Jackson County Community Justice Crew, Oregon Youth Employment Initiative, Northwest Youth Corps, and Student Conservation Association.



Siuslaw National Forest

2012 Invasive Plant Accomplishments

For 2012, the Invasive Plant Program targeted invasive plant populations that are degrading habitats of threatened or sensitive species and rare plant communities. Emphasis was also placed on the treatment of roads and rock pits which serve as sources of weed infestation.

Program Highlights include:

- Invasive European beachgrass (Ammophila arenaria) was chemically treated to improve nesting habitat for threatened western snowy plover. Anticipated results are reduced cost and increased effectiveness compared to past mechanical treatments.
- Second year treatment of invasive knotweed species along threatened coastal coho salmon streams has reduced weed cover by as much as 90 percent.
- First year chemical treatment of European beachgrass at Sand Lake Research Natural Area with a goal of restoring a rare native dune grassland. Previous manual control methods proved only marginally effective against beachgrass.
- Inventoried 3,100 acres for invasive species.



Figure 1. Sand Lake Research Natural Area. Invading European beachgrass (right) was chemically treated in September, 2012 to restore ecological function to a coastal sand dune native grassland.

Contact: Marty Stein 541-563-8417



Siuslaw National Forest SW Jefferson Way Corvallis, OR 97339



Figure 2. **Big Creek**. Following a second year of treatment, dense infestation s of giant knotweed (some dead canes still visible) were reduced in cover by greater than 90 percent.

2012 Accomplishments

SRS2 – Secure Rural Communities

 Scot's broom (41 ac), Japanese knotweed (32 ac.), European beachgrass (25 ac.), Himalayan blackberry (13 ac.), giant knotweed (6 ac.), Himalayan knotweed (1 ac.).

NFVW - Vegetation Management

 European beachgrass (196 ac.), false brome (178 ac.), gorse (102 ac.), giant knotweed (54ac.), Scot's broom (3 ac.), Canada thistle (3 ac.), tansy ragwort (2 ac.), yellow flag iris (1 ac.), Japanese knotweed (1 ac.), Himalayan knotweed (1ac.), meadow knapweed (1 ac.).

STWD - Stewardship

false brome (50 ac.).

CWKV - Timber Sale Collections

Scot's broom (55ac.), tansy ragwort (50 ac.).

Contributed or Volunteer

- Himalayan blackberry (12 ac.), Scot's broom (10 ac.), tansy ragwort (2 ac.).
- Total Acres Treated 839

Partners/Cooperators

Oregon Department of Agriculture, Lincoln County Soil and Water Conservation District, Lincoln County Road Department, Salmon-Drift Watershed Council, Siuslaw Soil and Water Conservation District, TEAMS, Mid-Coast Cooperative Weed Management Area.

Umpqua National Forest

2012 Invasive Plant Accomplishments

- Managed 321 acres of false brome with herbicide.
- Managed 63 acres of spotted and diffuse knapweed at 19 sites with herbicide.
- Managed 2581 additional acres of priority weeds including blackberry, Canada thistle, Italian thistle, Japanese knotweed, Malta thistle, meadow knapweed, rush skeletonweed, Scotch broom, St. Johnswort, vinca, yellow archangel, yellow starthistle and additional sites of false brome with a variety of manual methods.
- Surveyed all the water impoundments associated with the North Umpqua Hydroelectric Project for aquatic invasive species through partnership with the Center for Lakes and Reservoirs at Portland State University and PacifiCorp.
- Managed many of weed infestations with the Al Kennedy Alternative High School, the Phoenix Alternative High School and the Jefferson Conservation Corps.
- Experimented with tarping and manual removal of a yellow floating heart infestation while beginning NEPA planning for a long-term solution for this Class A weed.



Figure 1. Spotted knapweed.

Contact: Richard Helliwell, Ph: 541-957-3337



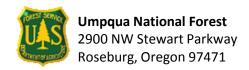
Figure 2. The crew experimenting with landscape fabric to control an infestation of yellow floating heart.

2012 Accomplishments

| Fund Code | Acres |
|---------------------|-------|
| Timber Sales (CWKV) | 307 |
| Base Program (NFVW) | 2284 |
| Timber (NFTM) | 124 |
| Title II (SRS2) | 250 |
| TOTAL | 2965 |

Partners/Cooperators:

Oregon Department of Agriculture
PacifiCorp
Douglas County Soil and Water Dept.
Douglas County Weed Board
Center for Lakes and Reserviors
Upper Willamette Weed Management Area
Douglas County Weed Management Area
Al Kennedy Alternative High School
Phoenix Alternative High School
Jefferson Conservation Corps



Wallowa-Whitman National Forest

2012 Invasive Plant Accomplishments

In 2012 the Wallowa-Whitman National Forest completed several invasive plant projects:

- Continued Implementation of the Invasive Plants Treatment Project Record of Decision and began treatment of the Invasive Plants across the forest.
- Effectively treated a total of 2,440 acres of invasive plant sites with an average outcome of 74% control.
- Completed Title II projects to control purple loosestrife along the Snake River, meadow hawkweed in the Eagle Cap Wilderness and whitetop in Baker County, as well as several other invasive plants in cooperation with Wallowa Resources, Oregon Dept. of Agriculture and Tri-County Cooperative Weed Management Area.
- Made initial release of biocontrol agent on puncturevine in the lower Imnaha River canyon.
- Monitored post-fire burned landscape and treated 200 acres of invasive plants (Cactus Mountain Fire).



Figure 1. Amorpha fruticosa, false indigo, a new invader along the Snake River



Figure 2. Results of 2011 trial applications of glyphosate (aquatic formulation) on Himalayan blackberry in Hells Canyon

2012 Accomplishments

| Acres | Fund Code | Activity |
|-------|-----------|------------------|
| 59 | RBRB | Range Betterment |
| 200 | WFSU | Wildfire |
| 1345 | NFVW | Base Program |
| 12 | PTNR | Partnerships |
| 824 | SRS2 | Title II |

2440 TOTAL

Partners/Cooperators

Oregon Department of Agriculture Tri-County Cooperative Weed Management Area Wallowa Resources

Contacts:

Gene Yates 541-523-1390 Beckijo Smergut-Wall 541-426-5529 Josh White 541-523-1940



Wallowa-Whitman National Forest PO Box 907 Baker City, Oregon 97814

Willamette National Forest

2012 Invasive Plant Accomplishments

Components of the Willamette NF Invasive Plant Program and their highlights include:

Treatment:

6330- acres – 4571 acres using manual and mechanical methods and 1759 acres using herbicides.

Survey:

- Survey of Blowout Road (back side of Detroit Reservoir) for false brome yielded 12 new sites.
- Surveys on Linn County side of North Santiam River specifically targeting knotweed.

Special Projects:

- Title 2 funded false brome treatment with Middle Fork Willamette WC and blackberry/Scotch broom treatment in Mule Meadow Restoration
- Post burn monitoring for study on the effects of prescribed burning on false brome in timber harvest units with UO Master's student on McKenzie District

Cooperative Relationships:

- Forest Botanist is FS representative on the Western Invasives Network Steering Committee
- District Botanists are members of Upper Willamette and Mid Willamette Cooperative Weed Management Areas

Education/Outreach/Prevention:

• Weed outreach program to residents of Idanha and Detroit with Marion County cooperators. Surveyed 65 properties and hosted a weed identification training. The idea is to help prevent escape of weedy species from private onto adjacent FS land.

Contact: Jenny Lippert 541 225-6440

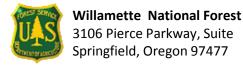




Figure 1. Edge between treated and untreated false brome in the forested understory at Foley Ridge, McKenzie Ranger District

2012 Accomplishments

252,000 NFVW Base Funding 2559 ac 142,646 CWKV Timber Sales 1759 ac

In addition we accomplished integrated weed treatments while doing other activities. The following list shows the acreage for integrated weed treatments:

| Timber (NFTM) | 20 |
|-------------------------------|------|
| Wildlife (NFWF) | 158 |
| Wildlife Partnerships (NFXN) | 10 |
| Payment to Counties (PSRS) | 300 |
| Fuels (WFHF) | 77 |
| Road Maintenance (CMRD, CMLG) | 1424 |

Partners/Cooperators: Oregon Department of Agriculture Weed Control Program, Eugene and Salem BLM, Eugene Water and Electric Board, PGE, BPA, Consumer Power, Middle Fork Willamette Watershed Council, North Santiam Watershed Council. Marion County, Marion SWCD, Youth Conservation Corps Crews on Middle Fork and McKenzie RDs

