



I've got pests! Who do I call?

NWSOMA 6.13.16

Christine Buhl, ODF Entomologist



Oregon Department of Forestry: Forest Health

Serving public and private landowners in Oregon:

- Christine Buhl, Entomologist christine.j.buhl@oregon.gov
- Sarah Navarro, Pathologist sarah.navarro@oregon.gov
- Wyatt Williams, Invasive species wyatt.williams@oregon.gov



ODF Forest Health Website

<http://tinyurl.com/odf-foresthealth>

Oregon Department of Forestry / Forest Benefits / Forest Health

Forest Health

- About Us
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- Fire
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The Forest Health program helps maintain and improve the health of Oregon's private and state-owned forests.

Our forest health professionals conduct aerial and ground surveys to monitor forest insects and tree diseases. They provide technical advice and training in the use of integrated pest management principles to help professional foresters and landowners meet their management goals and objectives.

Stewardship Foresters, urban foresters, forest entomologists and pathologists can help landowners identify forest pest problems and develop strategies to manage pests. Contact a [Stewardship Forester](#) or the Forest Health program for more information or assistance.

Factsheets & information

- Insects
- Diseases
- Invasives
- Other

Maps & data

- Statewide Insect & Disease Aerial Surveys
- Swiss Needle Cast



Resources

[Forest Health Highlights](#) - Joint product of ODF and the USFS Region 6 Oregon Forest Pest Detector

[Forest Insect & Disease Leaflets \(FIDLs\)](#)

[Grants & Incentives](#)

Partners

[Oregon Invasive Species Council](#)

Contact

Forest Health Program
 Private Forests Division
 2800 State Street
 Salem, OR 97310
 Phone: 503-945-7207
[Email](#)

U.S. Forest Service fact sheets (FIDLs)

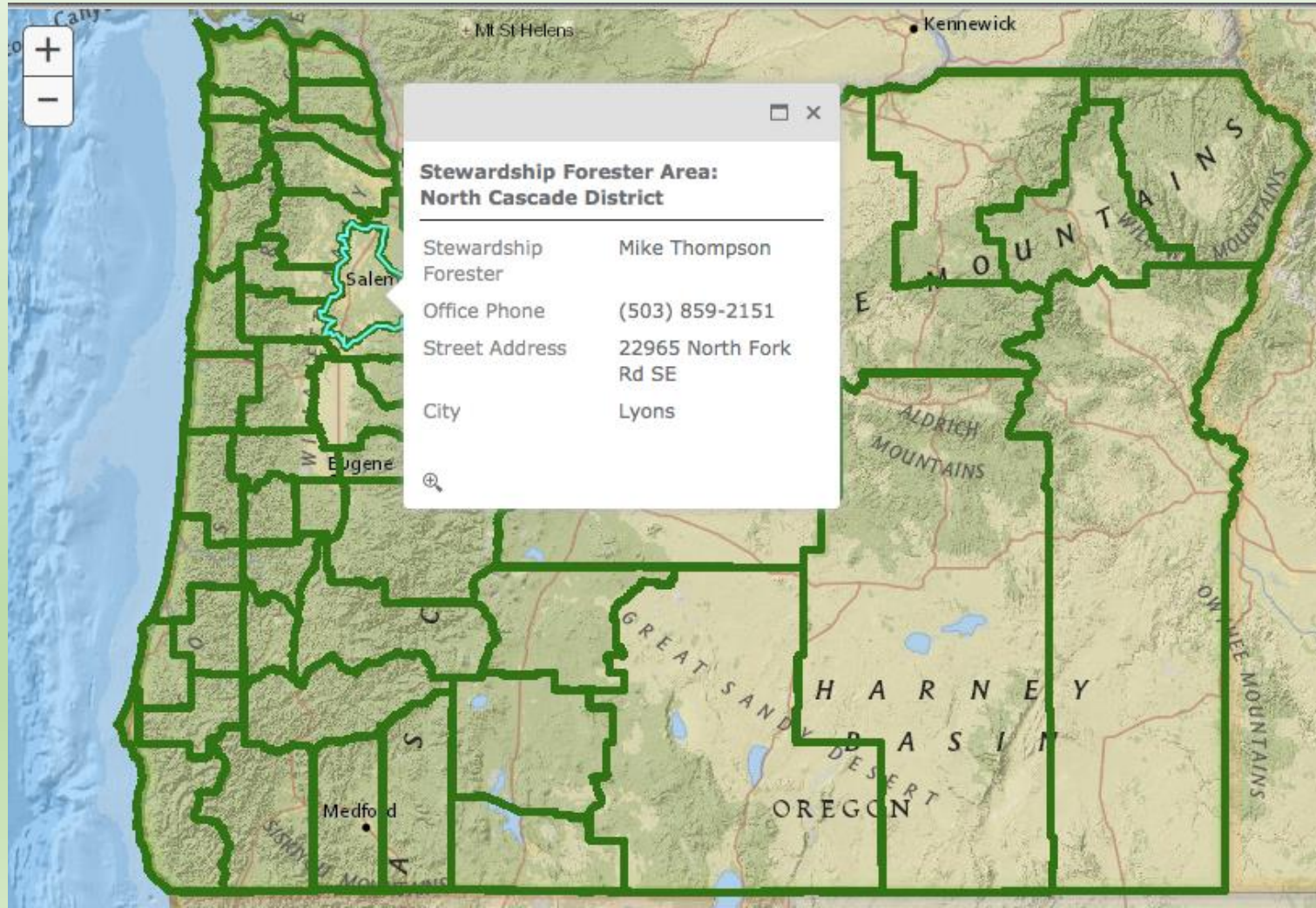
ODF fact sheets





Oregon Department of Forestry: Stewardship Foresters

<http://www.oregon.gov/ODF/Working/Pages/FindAForester.aspx>





Oregon State University: Forestry Extension

<http://extensionweb.forestry.oregonstate.edu/directory>

Ahrens, Glenn Extension Agent – Forestry & Natural Resources Counties served: Clackamas , Hood River, Marion	503-655-8631 Glenn.Ahrens@oregonstate.edu	Leavell, Daniel Extension Agent – Forestry & Natural Resources Counties served: Klamath , Lake	541-883-7131 ext. 8504 Daniel.Leavell@oregonstate.edu
Bennett, Max Extension Agent – Forestry & Natural Resources Counties served: Jackson , Josephine	541-776-7371 Max.Bennett@oregonstate.edu	Oester, Paul Extension Agent – Forestry & Natural Resources Counties served: Union , Umatilla, Wallowa	541-963-1010 Paul.t.Oester@oregonstate.edu
Burris, Frank Extension Agent – Forestry & Natural Resources Counties served: Curry	541-247-6672 Frank.Burris@oregonstate.edu	Parker, Bob Extension Agent – Forestry & Natural Resources Counties served: Baker , Grant	541-523-6418 Bob.Parker@oregonstate.edu
Grand, Lauren Extension Agent – Forestry & Natural Resources Counties served: Lane	541-579-2150 lauren.grand@oregonstate.edu	Strong, Nicole Extension Agent – Forestry & Natural Resources Counties served: Deschutes , Confederated Tribes of the Warm Springs, Crook, Jefferson	541-548-6088 Nicole.Strong@oregonstate.edu
Grotta, Amy Extension Agent – Forestry & Natural Resources Counties served: Columbia , Washington, Yamhill	503-397-3462 Amy.Grotta@oregonstate.edu	Withrow-Robinson, Brad Extension Agent – Forestry & Natural Resources Counties served: Benton , Linn, Polk	541-766-3554 Brad.W-R@oregonstate.edu



OSU: Insect, Weed management and Disease IPM control fact sheets

http://ipmnet.org/IPM_Handbooks.htm

Douglas-fir (*Pseudotsuga*)-Douglas-fir twig weevil

Cylindrocopturus furnissi

Pest description and crop damage damage The Douglas-fir twig weevil is a small, wingless, grayish-black beetle with white markings and sometimes pinkish spots. The larvae mine under the bark or inside twigs. Infested twigs and small branches often turn a reddish-brown and die back. Small, stressed trees are especially susceptible to attack by the weevils, particularly in dry years.

Biology and life history The weevil overwinters as a larva or adult. The adult lays eggs in twigs in the summer. The larvae feed by mining just beneath the bark and pupate at the ends of the galleries the following spring. There is one complete generation per year.

Management-cultural control

Pick off adults if seen. Remove and burn infested twigs. Keep trees healthy with proper cultural practices, as healthy trees can better withstand insect damage.

Management-chemical control

No chemical controls listed.

See "Douglas-fir" in:

[Christmas Tree Plantation Pests](#)

For more information

Johnson, W.T. and H.H. Lyon (1991), *Insects That Feed on Trees and Shrubs*, 2nd ed., Cornell University Press (p. 60).



Douglas-fir twig weevil

Cylindrocopturus furnissi Buchanan
Immature pupa showing damage

© Ken Gray Insect Image Collection

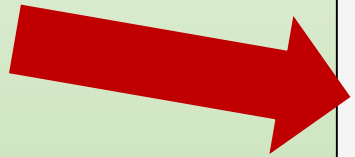


Douglas-fir twig weevil

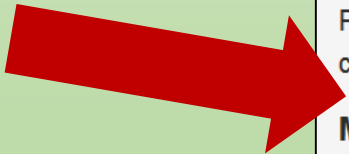
Cylindrocopturus furnissi Buchanan
Adult

© Ken Gray Insect Image Collection

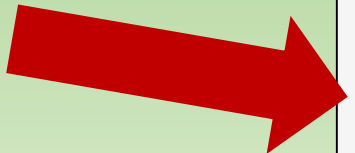
Biology



Control



References





OSU: Pacific NW Nursery IPM

<http://oregonstate.edu/dept/nurspest/index.htm>

PACIFIC NORTHWEST NURSERY IPM



WELCOME

Pest Activity Alerts On Twitter
[@PNWNurseryIPM](#)



[More Great Resources](#)

Info topics

Announcements

Pest alerts

Home	Insects	Mites	Diseases
Weeds	Vertebrates	Slugs/Snails	Abiotic

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Welcome to the Pacific Northwest Nursery IPM Website

Newest pages: [dustywing gallery](#), [lacewing gallery](#), [ground beetle gallery](#), [rove beetle gallery](#), [snakefly gallery](#), [soldier beetle gallery](#), and [natural enemy gallery](#) (in progress)

Looking for trouble? [Thrips](#) populations are increasing in maples. Flights of [Pacific flat-headed borers](#) have started. Usually we begin to see the [coreopsis beetle](#), [pale green weevil](#) up and feeding in May/early June. [Cottony camellia scale](#) crawlers are out now. Nymphs of [azalea lace bug](#) are out (and this is a key timing for intervention to prevent damage). We're on the tail-end of azalea sawfly feeding. I can confirm the activity of [roseslug](#). [Honeylocust plant bug](#) has been spotted. Adult flights have already been confirmed already in our

Hold the Date!

The Biocontrol Bus Biological Control Workshop & Tour

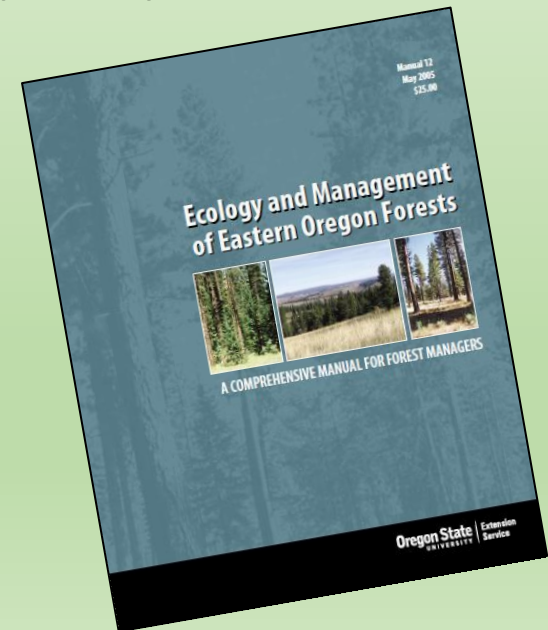
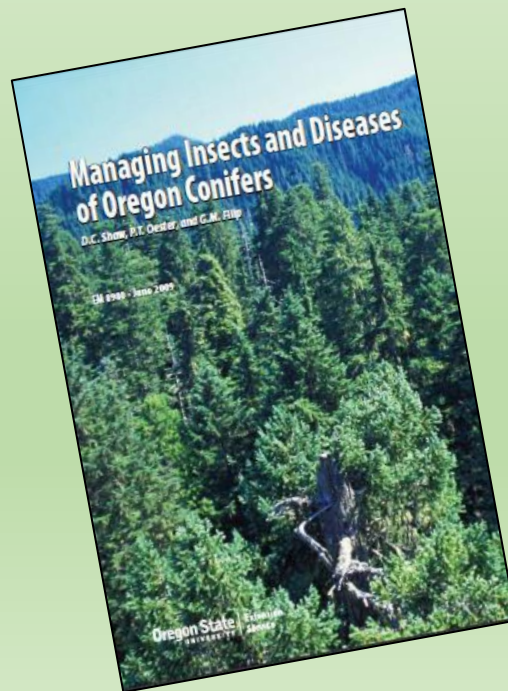
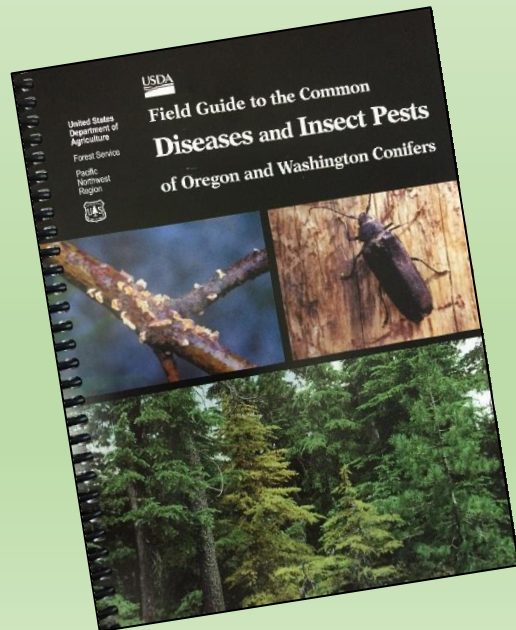
June 15 & 16, 2016
[Introductory workshop and tour](#)

(Tour is full: workshop has a

Publications

Pest & Management guides:

- *Field Guide to Common Diseases and Insect Pests of Oregon and Washington Conifers* (USFS)
- *Managing Insects and Diseases in Oregon Conifers* (OSU)
- *Ecology and Management of Eastern Oregon Forests* (OSU)





WASHINGTON STATE DEPARTMENT OF
Natural Resources

WA Dept. of Nat. Resources: Forest Health

Serving public and private landowners in Washington:

- Glenn Kohler, Entomologist glenn.kohler@dnr.wa.gov
- Dan Omdal, Pathologist daniel.omdal@dnr.wa.gov
- Amy Ramsey, Pathologist amy.Ramsey@dnr.wa.gov



WASHINGTON STATE DEPARTMENT OF
Natural Resources

WA DNR Forest Health Website

<http://www.dnr.wa.gov/ForestHealth>

WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES
PETER GOLDMARK | COMMISSIONER OF PUBLIC LANDS

Search here...

PROGRAMS AND SERVICES ABOUT MANAGED LANDS EMPLOYMENT

Forest Health Program

Growing Healthy Forests Throughout Washington

Growing healthy forests means using science to understand the needs of trees, bugs, fungi, fire, water, and more. The Department of Natural Resources develops information about all the types of forests that we manage—from rainforests on the Olympic Peninsula, to moderate Puget lowlands, to pine-dominated forests of eastern Washington. Our scientists carry out research and monitoring that DNR uses to make science-based decisions about its forest management practices.

DNR's Forest Health Program works with federal and other partners to provide technical assistance about tree and forest health care to all types of public and private landowners. Whether you are interested in healthy tree growth, diseases or pests that affect trees, or in how to create older forest conditions next to streams, lakes, and rivers, DNR can assist.

LANDOWNER ASSISTANCE CENTER

Thinning dense tree stands is the best way to protect your forest from severe insect or wildfire damage. [Cost-share funding is available](#) to reimburse landowners for the cost of thinning their forest to improve forest health.

Our landowner assistance services include sharing technical expertise and state-of-the-art forest and tree health care prescriptions with forest landowners through publications and workshops, site visits, applied research and cooperative studies with universities and government agencies. We also have demonstration sites across the state that show the benefits of various forest health practices.

Annual detection, ranging from aerial and ground surveys to pheromone (attractant) trapping, provides early warning of pest epidemics or reports on new pests. Close ties with western states, Canadian provinces and federal agencies provide timely alerts about threatening forest pests.

Annual Forest Health Highlights and other publications identify current pest problems and provide answers for dealing with them. The [2015 Forest Health Highlights Report](#) is now available.

For more information on forest health, see the [Forest Health Hazard Warning](#) webpage.

Find Forest Health Aerial Survey data on this interactive web service: <https://fortress.wa.gov/dnr/protection/igs/fmanfire/index.html> This is the place where the most current Annual and Cumulative Aerial Survey data will be displayed. The Cumulative Aerial Survey data set contains several million polygons, so to speed up the loading process, the user has to zoom in until "15 Year Mortality Indicator 1999-2013" title (on the left) switches from grey to black. Users can create their own PDF, JPG, and PNG maps of the field of view by clicking on the printer icon in the upper right corner.

Also, contact the [Forest Stewardship Program](#) for assistance on managing a family forest.

Animated Maps of Insect & Disease Damage:
State and federal forestry agencies have cooperated to produce annual aerial surveys of insect and disease damage for over 40 years. The annual maps have been compiled into an animated progression of damage by the [US Forest Service Forest Health Protection Program, PNW Region](#).

CONTACT

Karen Ripley
Forest Health Program
Manager
360-902-1691
karen.ripley@dnr.wa.gov

Wildfire Division
General Questions &
Information
360-902-1300
Fax 360-902-1757
wd@dnr.wa.gov

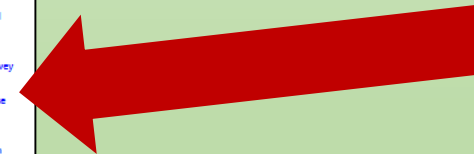
FILES

- [Eastern Washington Forest Health Report October 2014](#)
- [Bark Beetle Identification and Management in Washington](#)

RELATED LINKS

- [Fire Prevention and Fuel Management Mapping System](#)
- [Forest Health Aerial Survey Video](#)
- [Forest Insect and Disease Leaflets \(FIDLs\)](#)
- [US Forest Service PNW Forest Health Protection](#)
- [BC Canada Forest Health Aerial Survey](#)
- [Idaho Forest Health](#)

Links to other Forest
Health fact sheets





Washington State University: Forestry Extension

- [Main site, extension contacts: http://forestry.wsu.edu/](http://forestry.wsu.edu/)
- [Fact sheets: http://forestry.wsu.edu/resources/](http://forestry.wsu.edu/resources/)



Figure 1. Downed trees in a root rot pocket.

Figure 2. Dead inner foliage on western redcedar.

Pesticide info

- Oregon Department of Agriculture (ODA) Pesticides Division - regulations
<http://www.oregon.gov/ODA/programs/Pesticides/Pages/default.aspx>
- Pesticide Analytical Respond Center (PARC) – incident reporting
parc@oda.state.or.us 1-844-688-7272
- Pesticide Information Center Online (PICOL) – label info
<http://cru66.cahe.wsu.edu/labels/Labels.php>

PICOL: generate pesticide lists

[A-Z Index](#)

[Statewide](#)

[myWSU](#)

[WSU Home](#)



WSPRS

Pesticide Information Center Online

[Print](#)

PICOL Simple Search

[Advanced Search](#)

[PICOL Tutorials on YouTube](#)

[Dictionaries](#)

[I-502/I-692 Info](#)

State WA OR

Year of registration Current year only All years

Item to search on

Operator

Common Name

Crop

EQ

CONIFER NURSERY

[Submit Query](#)

[New Query](#)

Search by: crop, pest, ingredient, pesticide type, formulation, etc.



PICOL: generate pesticide lists


WSPRS
Pesticide Information Center Online

Search Results

Crop EQ CONIFER NURSERY
States EQ OR
Year EQ 2015

412 matching labels

[Format Labels](#) [Refine Query](#) [New Query](#)



PICOL: generate pesticide lists



WSPRS

Pesticide Information Center Online

PICOL Simple Search

Advanced Search

[PICOL Tutorials on YouTube](#)

[Dictionaries](#)

[I-502/I-692 Info](#)

Item to search on

Operator

Common Name

AND

Pest

EQ

BARK BEETLE

Submit Query

New Query

Previous Query
Crop EQ CONIFER NURSERY
States EQ OR
Year EQ 2015

Refine by an
additional
search item

PICOL: generate pesticide lists


WSPRS
Pesticide Information Center Online

Search Results

Crop EQ CONIFER NURSERY
States EQ OR
Year EQ 2015
AND
Pest EQ BARK BEETLE
States EQ OR
Year EQ 2015

3 matching labels

[Format Labels](#) [Refine Query](#) [New Query](#)



PICOL: generate pesticide lists

Choose your output type:

Standard (Name/EPA/SLN/Ingre/Ingre Conc/RegName)

All (All recorded information)

Pest List (Name/Ingre/All listed pests)

Summary (Summary of recorded information)

Crop List (Name/Ingre/All listed crops)

Tabular (Users choice), select the fields below:

1	<input type="text" value="none"/>	2	<input type="text" value="none"/>	3	<input type="text" value="none"/>
4	<input type="text" value="Add Date"/>	5	<input type="text" value="none"/>	6	<input type="text" value="none"/>
7	<input type="text" value="Crop"/>	8	<input type="text" value="none"/>	9	<input type="text" value="none"/>

none
Add Date
Application
Crop
EPA Number
ESSB 6206 (WA only)
Formulation
Groundwater Advisory Stmt
I-502/I-692(WA only)
Ingredient
Ingredient Concentration
Intended Users
Label Revision
Modification Date

Refine Query New Query

Add output options

PICOL: generate pesticide lists

PICOL OUTPUT – STANDARD

Crop EQ CONIFER NURSERY
 States EQ OR
 Year EQ 2015
 AND
 Pest EQ BARK BEETLE
 States EQ OR
 Year EQ 2015

Format Labels

Export to Excel

Refine Query

New Query

NAME	EPA #	SLN #	SLN name	Sup #	Sup Name	INGREDIENT	CONCENTRATION	RESISTANCE SOURCE	RESISTANCE CODE	REGISTRANT NAME	Sect 18	Sect 18 Expiration
ONYXPRO INSECTICIDE [63. WA ONYXPRO INSECTICIDE [63. OR	279-4269					BIFENTHRIN	23.4%	IRAC	3	FMC CORP - DIV AGRICULTURAL SOLUTIONS		
ORNAZIN 3% EC BOTANICAL INSECTICIDE [3. WA ORNAZIN 3% EC BOTANICAL INSECTICIDE [3. OR	5481-476-67690					AZADIRACHTIN	3.0%	IRAC	un	SEPRO CORPORATION		
PERMETHRIN 3.2 AG	83222-3					PERMETHRIN	36.8%	IRAC	3	DIRECT AG SOURCE -R3 AG-		

Format Labels

Export to Excel

Refine Query

New Query

Results!

Invasive species

Report a find:

1-866-INVADER

<https://oregoninvasiveshotline.org/>



Oregon Forest Pest Detector (invasive species detection training):

<http://pestdetector.forestry.oregonstate.edu/>

Questions?



<http://insect.pnwhandbooks.org/hort/landscape/hosts-and-pests/douglas-fir-pseudotsuga-coneworm>