## A Workshop for

## Creating Stand-Level Prescriptions to Integrate Ecological & Fuel Management Objectives for Dry Forests of the Eastern Cascade Range

### October 13-15, 2009 Eagle Crest Resort Redmond, Oregon



This workshop will bring together practitioners from multiple disciplines to discuss and develop stand-level prescriptions that further conservation of the northern spotted owl (NSO) and

integrate ecological and fuel management objectives for dry forest restoration in the eastern Cascades of Washington, Oregon

and California. An intended long-term outcome of the workshop is the implementation of treatment objectives and strategies developed during this workshop in a network of management study sites across the geographic and ecological breadth of the eastern Cascades.



## **Intended Audience**

Biologists, silviculturists, fuel and fire specialists, forest entomologists and pathologists, ecologists, planners, managers, and others responsible for planning and implementing treatments intended to conserve northern spotted owls, restore ecological processes, and reduce the potential for significant wildfire impacts in dry-forest ecosystems.

## Workshop Objectives

- Define fuel, silvicultural, wildlife, and other ecological objectives for high-quality owl habitat (i.e. Recovery Action 6) and for other dry-forest types (i.e. Recovery Action 7).
- Describe silvicultural options, tools, and procedures to meet those objectives.
- Discuss implementation of prescriptions and the long-term goal to create a management study template, monitoring elements, and a regional management study network of sites to gain reliable data and knowledge about the effectiveness or validity of prescriptions.

Additional information and post-workshop materials can be found under the "Dry Forest Workshop Series: 2009 Workshop" link at <u>http://www.fws.gov/oregonfwo/FieldOffices/Bend/</u>.

## **Registration required! Agenda and materials attached.**



#### Arrangements

<u>Registration</u>: There is no fee for the workshop, but you need you to register in advance so we can adequately plan for group discussions, etc. Please complete the registration form on the following page and email the completed version to <u>Sue Livingston@fws.gov</u>. Please register by October 1. Register by September 1 if you are applying for a travel grant. If you miss the registration deadline, please contact Sue Livingston.

<u>Lodging</u>: The meeting will be held at the Eagle Crest Resort, Redmond, Oregon. We have reserved a block of rooms at the government rate (See table below). Rooms will be held at these rates until September 12, after which, rates can not be assured. You must make your own reservations either online at <u>www.eagle-crest.com</u> or by calling 800-682-4786. When making reservations, use group code 43U4MJ.

| Units available                                                          | Rate/night | Typical layout                                                |
|--------------------------------------------------------------------------|------------|---------------------------------------------------------------|
| King room                                                                | \$90       | 1 king bed                                                    |
| Double queen room                                                        | \$90       | 2 queen beds                                                  |
| 1 bedroom suite                                                          | \$90       | 1 queen or king bed with sofa-sleeper in common area          |
| 2 bedroom condo                                                          | \$180      | 1 queen or king plus 2 twins plus sofa-sleeper in common      |
|                                                                          |            | area                                                          |
| 3 bedroom condo                                                          | \$200      | Same as 2 bedroom condo plus queen in 3 <sup>rd</sup> bedroom |
| Some units may vary slightly in layout. Confirm when making reservation. |            |                                                               |

<u>Speakers</u>: We will have a laptop and computer projector to give your presentation. If you have other needs, contact Sue Livingston at <u>Sue\_Livingston@fws.gov</u>.

### **Travel Grants**

The Joint Fire Science Program has given the Workshop a grant to fund travel for people who might not be able to participate for lack of travel funds. Travel grants are open to any person who wants to attend the meeting. Most agency people should plan to use their own funds to attend, if possible (we've made it cheap by not charging a conference fee). Awards will be prioritized by level of participation in the workshop (e.g. speakers first) and amount requested. Please be sparing in your requests so we can help as many people as possible and to increase your chances of getting a grant. For example, you might elect to share a room or suite. See the registration page to apply. Apply early. The deadline to apply for travel grants is September 1. We will let applicants know if they have the grant by Sept 15. Contact John Lehmkuhl (jlehmkuhl@fs.fed.us) for information on travel grants.

#### **REGISTRATION FORM**

# A Workshop for Creating Stand-Level Prescriptions that Integrate Ecological & Fuel Management Objectives Across Dry Forests of the Eastern Cascades

October 13-15, 2009 Eagle Crest Resort, Redmond, Oregon

| Name:<br>Affiliation:<br>Address:<br>City:<br>Phone <b>:</b>               | Stat<br>e-ma                                              | te: Zip:<br>ail:                                                    |
|----------------------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------|
| Primary field of expertise:                                                | (mark with x)                                             |                                                                     |
| Fire:<br>Fuels:<br>Silviculture:                                           | Fisheries:<br>Planning:<br>Wildlife:                      | Forest insect/disease:<br>Plant ecology/botany:<br>Other: (specify) |
| I will / will not be<br>I will / will not atte                             | staying at the Eagle Crest Rond the field trip on Thursda | esort during the workshop.<br>y afternoon.                          |
| I want a travel grant: Yes_                                                | , No <u>If yes,</u> total                                 | amount from below: \$                                               |
| Transportation: Yes<br>Mode: by air, trai<br><u>Total transportation</u> : | _, No<br>n, private vehicle (\$.55/<br>\$                 | /mile)                                                              |
| <b>Lodging</b> at Eagle Crest I<br>Single occupancy:                       | Resort (workshop will pay he<br>@ \$90/night              | otel directly): Yes, No                                             |
| Double occupancy:                                                          | @ \$90 / 2 people = \$4                                   | 5/night                                                             |
| 2-bedroom condo:<br>I'll share with:                                       | @ \$180 / people                                          | e = \$/night                                                        |
| 3-bedroom condo:<br>I'll share with:                                       | @ \$200 / people                                          | e = \$/night                                                        |
| No. nights: Tuesday                                                        | , Wednesday, Thurso                                       | day                                                                 |
| Total lodging: \$                                                          |                                                           |                                                                     |

Please FAX, e-mail or send your completed registration form by October 1, 2009, September 1 if applying for a travel grant, to:

 Sue Livingston
 Tel: 503-231-6179

 2600 SE 98<sup>th</sup> Ave, Suite 100
 FAX: 503-231-6195

 Portland, OR 97266
 sue livingston@fws.gov

#### Agenda

**Tuesday**, PM: <u>Objective</u>: Define restoration, fuel, vegetation, wildlife, and other ecological objectives, i.e., desired future conditions, for high-quality owl habitat and for non-habitat forest types within the context of the NSO Recovery Plan.

- 1300-1310 *Welcome, introduction, goals & objectives of workshop.* Paul Phifer, US Fish and Wildlife Service.
- 1310-1340 *Fire ecology of the eastern Cascades and implications for dry forest management or restoration.* <u>Stephen Fitzgerald</u>, OSU Extension Service, Redmond.
- 1340-1400 *The scientific basis for the habitat conservation strategy in the Recovery Plan, with emphasis on stand-scale management objectives.* Jerry Franklin, University of Washington.
- 1400-1420 Fuel management objectives. <u>Richy Harrod</u>, Okanogan-Wenatchee NF.
- 1420-1440 *Overstory and understory vegetation objectives*. <u>Carl Skinner</u>, PSW Research Station, Redding.
- 1440-1500 *Spatial patterns: homogenous or heterogeneous patchy stands?* Paul Hessburg, PNW Research Station, Wenatchee.
- 1500-1530 Break
- 1530-1550 *Below-ground ecological objectives*. Jane Smith, PNW Research Station, Corvallis.
- 1550-1610 *Northern Spotted Owl habitat objectives*. Jim Thrailkill, US Fish and Wildlife Service, Portland.
- 1610-1630 *Wildlife and prey habitat objectives.* John Lehmkuhl, PNW Research Station, Wenatchee, & <u>Kim Mellen-McLean</u>, US Forest Service, Portland
- 1630-1730 Break-out groups. Moderator: John Lehmkuhl <u>Objective</u>: Define measurable objectives, or desired future conditions, for fuels, vegetation, wildlife habitat. etc. for silvicultural treatments. Groups report the next day.

## Wednesday: <u>Objective</u>: Develop stand management and silvicultural options, tools, and procedures for meeting objectives discussed during Day 1.

800-900 Reports of treatment objectives groups & discussion. John Bailey, OSU.
900-920 Summary of silviculture recommendations from Redmond, Ashland, and Wenatchee workshops. Sue Livingston, US Fish and Wildlife Service, Portland.
920-940 Stand management for ecological objectives in the Washington Cascades. Matt Dahlgreen, Okanogan-Wenatchee NF, and TBA, Washington Department of Natural Resources, Klickitat Unit
940-1000 Stand management for ecological objectives in the Oregon Cascades. Jennifer O'Reilly, US Fish and Wildlife Service, Bend, and Joan Kittrell, Deschutes NF.

| 1000-1030 | Break                                                                                                                                                                            |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1030-1050 | Stand management for ecological objectives in the California Cascades.<br>Elizabeth Willy, US Fish and Wildlife Service, Yreka, and <u>Christy Cheyne,</u><br><u>Klamath NF.</u> |
| 1050-1110 | Interagency initiatives: the Tapash Sustainable Forests Collaborative of south-<br>central WA. <u>Reese Lolley</u> , The Nature Conservancy, Yakima.                             |
| 1110-1130 | <i>Risk Assessment and Experiences With Silviculture in Owl Habitats</i> . <u>Larry Irwin</u> , NCASI.                                                                           |
| 1130-1150 | Integrated forest management by the Klamath Indian Nation. <u>TBA</u> .                                                                                                          |
| 1150-1300 | Lunch (on your own)                                                                                                                                                              |
| 1300-1320 | Silvicultural experiments on the Pringle Falls Experimental Forest. Andy Youngblood, PNW Research Station, La Grande.                                                            |
| 1320-1340 | Silvicultural experiments in northern California. Eric Knapp, PSW Research Station, Redding.                                                                                     |
| 1340-1400 | Perspectives on developing silviculture for ecological objectives & large-scale management studies. <u>Paul Anderson</u> , PNW Research Station, Corvallis.                      |
| 1400-1430 | Panel discussion. John Bailey, moderator.                                                                                                                                        |
| 1430-1500 | Break                                                                                                                                                                            |
| 1500-1700 | Multi-disciplinary break-out groups (geographically organized) to review and evaluate a proposed prescription matrix considering three habitat conditions:                       |
|           | (a) Existing high-quality NSO habitat (e.g. dry, mixed-conifer forest),                                                                                                          |
|           | (b) Potential NSO habitat as supplemental or replacement habitat, and                                                                                                            |
|           | (c) Other surrounding forested areas that likely will not be habitat (e.g., pine-dominated forest)                                                                               |
|           | Modify/add and describe silvicultural tools and techniques within this prescription matrix. John Bailey, Oregon State University, Corvallis.                                     |
| 1645-1700 | Wrap-up. <u>John Bailey</u> , OSU.                                                                                                                                               |

Thursday, AM: <u>Objective</u>: Continue group discussion from yesterday and develop recommendations. Describe possible next steps for landscape-scale planning, implementation and monitoring.

| 800-810  | <i>Recap</i> of yesterday, focusing on similarities across geographic areas.                            |
|----------|---------------------------------------------------------------------------------------------------------|
| 810-930  | <i>Group reports</i> to the entire workshop audience relative to the three types of habitat conditions. |
| 020 1015 | Discussion and recommendations, John Lohmkuhl, DNW Descerab Station                                     |

930-1015 *Discussion and recommendations*. John Lehmkuhl, PNW Research Station, Wenatchee.

| 1015-1040 | Break                                                                                                                                                                                                                                                       |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1040-1100 | <i>Methods for landscape-scale planning of fuel treatments</i> . <u>Alan Ager</u> , PNW Research Station, Western Wildlands Environmental Threat Assessment Center, Prineville                                                                              |
| 1100-1120 | Landscape planning for fire and fuels issues on National Forests in California.<br>Don Yasuda, US Forest Service, El Dorado National Forest.                                                                                                                |
| 1120-1200 | Moving forward: How can we best implement, test, and improve these ideas?<br>Implementation in a management study template and a regional study network.<br>Presentation, discussion, & recommendations. John Lehmkuhl, PNW Research<br>Station, Wenatchee. |

#### Thursday, PM: Field Trip to Pringle Falls Experimental Forest.

<u>Andy Youngblood</u>, La Grande Forestry Sciences Lab, will lead a field trip to visit sites at Lookout Mountain that are planned for treatment under five different experimental prescriptions. The 3000-acre project area grades from mixed conifer at high elevations to pure ponderosa pine at low elevations. Prescriptions involve various levels of thinning and fuel reduction to create and assess different stand structures. Lookout Mountain is on the eastern edge of NSO range, and also has goshawk habitat. The Deschutes NF is very interested in overlaying NSO habitat studies on planned treatments in one block of the experiment. Opportunities also exist for collaborative studies of pine-associated wildlife and other issues. The study plan has been approved, and the Deschutes NF is currently working on a major EIS. We will be back in Redmond no later than 6 PM.

Pringle Falls Experimental Forest is a diverse natural laboratory within the Deschutes National Forest in central Oregon. It was formally established in 1931 as a center for silviculture, forest management, and insect and disease research in ponderosa pine forests east of the Oregon Cascade Range. Pringle Falls is maintained by the Pacific Northwest Research Station for research and education in ecosystem structure and function and for demonstration of forest management techniques. It provides outstanding examples of undisturbed and managed ponderosa pine, lodgepole pine, and higher elevation mixed conifer forests occurring on 6,600-year-old Mount Mazama pumice and ash common throughout central and south-central Oregon. See <a href="http://www.fs.fed.us/pnw/lagrande/research/pringle.shtml">http://www.fs.fed.us/pnw/lagrande/research/pringle.shtml</a> for more information.

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This workshop will strive to initiate a long-term (10-year) program of collaboration between managers and scientists to rapidly accelerate the development of effective and ecologically sound dry forest management in the Eastern Cascade Range. In

addition to restoration of stable fire regimes and ecological conditions, the program and its results on

the ground will promote recovery of the Northern Spotted Owl (NSO), as described in the Northwest Forest Plan and the NSO Recovery Plan (2008). The workshop and subsequent program will be coordinated by the interagency Eastern Cascades Dry Forest Landscape Working Group formed under the NSO Recovery Plan and lead by the US Fish and Wildlife Service.



This workshop continues efforts begun during workshops in Redmond, OR, (2005), Ashland, OR, (2006), and Wenatchee, WA (2007) that brought together fuel specialists, silviculturists, and wildlife biologists to discuss and develop integrated landscape and stand-level management strategies and practices. The proposed workshop will focus specifically on several stand-level needs and recommendations from earlier workshops:

- $\rightarrow$  Better integrate NSO, prey, silviculture and fire objectives.
- $\rightarrow$  Provide prescription and implementation guidelines for managers.
- $\rightarrow$  Develop implementation strategies.
- → Link scientists and managers to understand short- and long-term treatment impacts through monitoring and research.
- $\rightarrow$  Hold future workshops to continue the dialogue.

The workshop will address long-standing and current issues related to fire and fuel management practices in Late-Successional Reserves and Matrix Forest under the Northwest Forest Plan. The workshop also will directly address Recovery Actions in the 2008 Recovery Plan for the Northern Spotted Owl. Recovery Action 6 requires the maintenance and restoration of high-quality NSO habitat. Recovery Action 7 describes habitat management outside high-quality owl habitat as: intensive management to protect high-quality habitat, and management to reduce fire risk while maintaining the capacity for rapid development of and replacement of high-quality

owl habitat. Both recovery actions will require novel silvicultural and fuel treatment approaches to restore, protect, or develop owl habitat, and to manage for overall dry forest integrity. The need for novel prescriptions is all the more urgent considering the uncertain effects of climate change on forest development under both passive and active conventional management. Integral to the proposed program will be implementation of Recovery Action 10 (restoration of habitat elements like snags) and Recovery Action 11 (design and conduct experiments). *This workshop will focus on stand-level management practices as the building blocks for landscape management. Landscape planning issues and methods will be discussed for context and may be the topic for a future workshop.* 

The workshop will promote interagency coordination and collaboration across the Eastern Cascades region. Regional coordination of silvicultural practices, and monitoring design and implementation as adaptive management studies, will lead to rapid, consistent, and reliable development of effective management practices. In the absence of a coordinated effort, progress toward NSO recovery and ecosystem management of dry forests will be slow, haphazard, and uncertain. The alternative to our organized approach for effective management is a hodge-podge of unconnected efforts that treat many acres, but from which we learn little about the effectiveness or validity of our actions for forest health and species conservation.

#### Goals

The goal of the workshop is to initiate long-term (10-year) regional collaboration between managers and scientists to develop and test forest restoration prescriptions that integrate ecological objectives specifically related to NSO conservation in dry forests of the eastern Cascade Range in Washington, Oregon, and northern California. We have learned quite a bit about the dry forest from local experience and research: now is the time to put all that together in a coherent and coordinated program that uses adaptive learning to accelerate progress toward effective dry forest management and NSO conservation.

We intend a long-term outcome from the workshop to be the establishment of a network of management study sites that replicate treatment objectives and strategies that we develop in this workshop across the geographic and ecological breadth of the region, similar to the successful Fire and Fire Surrogate<sup>1</sup> and the Birds and Burns<sup>2</sup> studies. Several of the participants in our workshop have been involved in those studies, and they will bring their rich experience to bear on our efforts.

Such a network of study sites with common objectives, prescriptions, and monitoring would be a powerful learning tool for managers and scientists to rapidly improve science-based management strategies and practices, and for convincing critics that land managers are serious about effective conservation management. The challenge of this task will be creating a sufficiently specific and powerful, yet flexible, framework that allows for regional variation in forest vegetation, environment, and societal needs.

<sup>&</sup>lt;sup>1</sup> <u>http://frames.nbii.gov/portal/server.pt?open=512&objID=363&mode=2&in\_hi\_userid=2&cached=true</u>

<sup>&</sup>lt;sup>2</sup> http://www.rmrs.nau.edu/wildlife/birdsnburns/

#### **Objectives**

- Define restoration, fuel, silvicultural, wildlife, and other ecological objectives for high-quality owl habitat (i.e. Recovery Action 6) and for other dry-forest types (i.e. Recovery Action 7).
- Describe silvicultural options, tools, and procedures to meet those objectives.
- Discuss implementation of prescriptions and the long-term goal to create a management study template, monitoring elements, and a regional management study network of sites to gain reliable data and knowledge about the effectiveness or validity of prescriptions.

#### Products

- (1) Publish a Forest Service general technical report (GTR) that details the outcomes and recommendations of the workshop. The GTR will probably not be a proceedings, rather a synthesis to the workshop issues, discussions, and recommendations.
- (2) Post on a website abstracts and PowerPoint files of presentations.
- (3) Consider publishing a synthesis paper in a peer-reviewed journal, such as *BioScience* or *Frontiers in Ecology and the Environment*. Authors will be participants who are interested in contributing to the paper.

#### Workshop Organizers & Contacts

- Sue Livingston, US Fish & Wildlife Service, Portland, OR. (503) 231-6179. Sue\_Livingston@fws.gov.
- John Lehmkuhl, US Forest Service, Pacific Northwest Research Station, Wenatchee, WA. (509) 664-1737. jlehmkuhl@fs.fed.us.
- John Bailey, College of Forestry, Oregon State University, Corvallis, OR. (541) 737-1497. John.Bailey@oregonstate.edu.
- *Eric Knapp*, US Forest Service, Pacific Southwest Research Station, Redding, CA. (530) 226-2555. <u>eknapp@fs.fed.us</u>.
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