

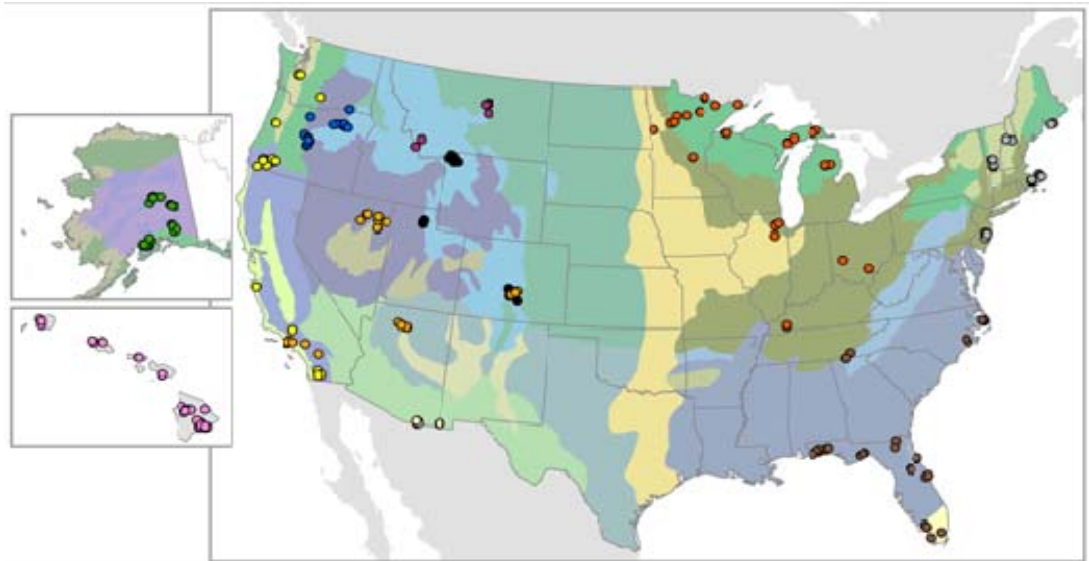


The Digital Photo Series

<http://www.fs.fed.us/pnw/fera>

Background

Photo series provide a quick and easy way to quantify and describe current fuel and vegetation properties such as loading of dead and down woody material, tree density, or height of understory vegetation. This information is critical for making fuel management decisions and predicting fire behavior and fire effects. A significant national effort over the last decade has been undertaken to produce photos series for previously unrepresented vegetation types. Most recently, photo series for natural fuels have been published for: hardwoods with spruce (Alaska); jack pine (Central and Lake States); Oregon white oak, California deciduous oak, and mixed conifer with shrubs (western U.S.); sand hill, sand pine scrub, and hardwoods with white pine (southeast U.S.); northern hardwoods, pitch pine, and red spruce/balsam fir (northeast U.S.); sagebrush with grass and ponderosa pine-juniper (central Montana); and oak/juniper woodlands (southern Arizona and New Mexico).



The Natural Fuels Photo Series, a photo guide designed for field use, is a source of high quality fuels data and images for a wide variety of forest and range ecosystems throughout the United States. The original photo series guides were primarily developed for field-based assessments. Technological advances since the inception of the Natural Fuels Photos Series, coupled with development of new fire- and natural resource-based software applications highlight the need for an electronic version of the Photo Series. The Digital Photo Series is a user-friendly interface to the existing database of fuels information and high quality photographs.



About The Digital Photo Series

The Digital Photo Series contains searchable data and images for nearly 400 sites, representing fuels in a wide range of ecosystems throughout the United States. Each entry includes a site description, species composition, fuel loading and arrangement, and overstory composition and structure. This information can be used for planning fuels treatments or other management actions and as inputs to fire behavior and fire effects models and applications.

The Digital Photo Series has the ability to grow as new photo series are developed and as the priorities and needs of fire and fuels managers change and evolve. The Digital Photo Series is nearing completion and a beta version is available online (<http://depts.washington.edu/nwfire/dps/>). The Digital Photo Series will be available in two formats. Users will be able to access data and images using their web browser through an internet connection, or where the internet is not available, by loading the data and images from a CD. Either way the Digital Photo Series will have the same look, feel and functionality.

The screenshot displays a web browser window with the following content:

- Navigation:** File, Edit, View, Go, Bookmarks, Tools, Help
- Site Selection:** Digital Photo Series [Search] (Expand tree to select sites)
- Site List:** I: Pacific Northwest; II: Alaska; III: Rocky Mountains; IV: Central and Lake States; V: Midwest Red and White Pine; VI: Southeast United States; VII: Western United States; VIII: Oregon White Oak
- Site Information:**
 - Coordinates: N 46° 17' 12.72" W 120° 45' 3.69"
 - Land owner: Yakima Indian Reservation (Bureau of Indian Affairs)
 - SAF Cover Type: Oregon White Oak (SAF 233)
 - Plant Association: Oregon white oak/blue wild rye woodland
 - Ecoregion Division: Marine - Mountain Provinces (M240)
 - Ecoregion Province: Cascade Mixed Forest - Coniferous Forest - Alpine Meadow (M242)
 - Fire history: Unknown
 - State: Washington
 - Elevation: 1,540 ft
 - Slope: 20%
 - Aspect: NNW
 - Crown closure: 74%
 - Notes: If the sum of total forest floor constancy and the mineral soil constancy is less than 100, then the remainder is the constancy of a grass-dominated surface material with no duff.
- Site Species:**
 - Trees (% of stems): *Quercus garryana* (100)
 - Seedlings (% of stems): *Quercus garryana* (100)
 - Understory (% cover): *Graminoids* (7)
- Undertory Vegetation:**

Coverage (%)	Lifeform			
	Seedling	Shrub	Forb	Graminoid
---	tr	6	7	---
Avg height (ft)	---	1.4	0.0	0.4
Biomass (lbs/ac)	---	1	90	145
Density (stems/ac)	7,464	---	---	---
- Saplings and Trees:**

	Size class (diameter at breast height) in inches			
	<= 4	4 - 9	9 - 16	> 16
Most common species (% of stems)	<i>Quercus garryana</i> (100)			
Tree density (stems/ac)	470	448	43	491
Live	262	332	29	361
Dead	188	116	14	130
Avg DBH (in)	2.2	4.0	9.9	6.3
Live	2.2	6.1	10.1	6.5
Dead	2.2	5.6	9.8	6.1
Avg height (ft)	9.0	16.0	22.0	17.0
Live	11.0	18.0	26.0	19.0
Dead	6.0	10.0	14.0	10.0
Avg height to crown base (ft)	2.0	4.0	4.0	4.0
Live	2.0	4.0	4.0	4.0
Dead	2.0	2.0	---	2.0
Avg height to live crown (ft)	4.0	7.0	8.0	7.0
- Woody Material:**

Diameter (in)	Loading (tons/ac)		Density (pieces/ac)	
	Sound	Rotten	Sound	Rotten
<= 0.25	0.40	0	0.40	---
0.26 - 1.0	1.00	0	1.00	---
1.1 - 3.0	1.40	0	1.40	---
3.1 - 9.0	2.20	0.10	2.30	88 5 93
> 9.0	0	0	0	0 0 0
Total	5.00	0.10	5.10	88 5 93
- Forest Floor:**

	Depth (in)	Loading (tons/ac)	Constancy (percent)
Surface material	2.4	6.40	95
Duff	1.0	3.40	56
Total forest floor	3.0	9.80	87
Substrate (Mineral soil)			4
- Documentation:** [Photo Series] [Volume VIII] [WO series] Download WO series: [Excel] [Text] [XML]

Digital Photo Series

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Logos for: nfp, U.S. Forest Service, U.S. Department of Agriculture, and other related agencies.

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Visit the Photo Series Website at:

<http://www.fs.fed.us/pnw/fera/photoseries.html>