

## **CURRICULUM VITAE**

### **DAVID L. PETERSON**

USDA Forest Service  
Pacific Northwest Research Station  
400 N. 34<sup>th</sup> Street, Suite 201  
Seattle, WA 98103 (USA)

Telephone 206.732.7812  
Fax 206.732.7801  
Email [peterston@fs.fed.us](mailto:peterston@fs.fed.us)

### **EDUCATION**

1980 Ph.D. Forest Ecology, University of Illinois, Urbana

1977 M.S. Botany, University of Illinois, Urbana

1976 B.S. Zoology, University of Illinois, Urbana

### **PROFESSIONAL EXPERIENCE**

- 2001- Research Biologist (Team Leader), USDA Forest Service, Pacific Northwest Research Station, Fire and Environmental Research Applications Team; and Affiliate Professor, School of Environmental and Forest Sciences, University of Washington, Seattle, WA
- 1989-01 Research Biologist (Field Station Leader), U.S. Geological Survey, Cascadia Field Station; and Professor, College of Forest Resources, University of Washington, Seattle, WA
- 1984-89 Research Ecologist, USDA Forest Service, Atmospheric Deposition Effects Research Work Unit, Pacific Southwest Research Station, Riverside, CA; Unit Leader 1988-89
- 1981-84 Research Ecologist, USDA Forest Service, Fire Management Planning Research Work Unit, Pacific Southwest Research Station, Riverside, CA
- 1980-81 Visiting Assistant Professor, Department of Forestry, University of Illinois, Urbana

## **FIELDS OF SCIENTIFIC INTEREST**

Fire science and fire ecology

Effects of climate change on biological and human systems

Mountain ecology and subalpine forest ecology

Effects of environmental stress on tree growth and forest ecosystems

Resource management on public lands

Ecological scale applications

## **PUBLICATIONS**

- Marcinkowski, K.W. and D.L. Peterson. Non-stationary temporal response of mountain hemlock growth to climatic variability in the North Cascades, Washington, USA. *Canadian Journal of Forest Research*. In review.
- Halofsky, J.E., D.L. Peterson, L.A. Joyce, C.I. Millar, J.M. Rice, and C.W. Swanston. Implementing climate change adaptation in forested regions of the western United States. In V.A. Sample and R.P. Bixler (eds.), *Forest Conservation and Management in the Anthropocene*. University Press of Colorado, Boulder. In press.
- Halofsky, J.E., D.L. Peterson, L.A. Joyce, C.I. Millar, J.M. Rice, and C.W. Swanston. 2014. Implementing climate change adaptation in forested regions of the United States. In V.A. Sample and R.P. Bixler (eds/), *Forest conservation and management in the Anthropocene: conference proceedings*. USDA Forest Service Proceedings RMRS-P-71. Rocky Mountain Research Station, Fort Collins, CO.
- Marcinkowski, K.W. and D.L. Peterson. 2014. A 350-year reconstruction of the response of South Cascade Glacier to interannual and interdecadal climatic variability. *Northwest Science*. In press.
- Kang, S., S.W. Running, J.S. Kimball, D.B. Fagre, A. Michaelis, D.L. Peterson, J.E. Halofsky, and S. Hong. 2014. Effects of spatial and temporal climatic variability on terrestrial carbon and water fluxes in the Pacific Northwest, USA. *Environmental Modelling and Software* 51:228-239.
- Millar, C.I., C.W. Swanston, and D.L. Peterson. 2014. Adapting to climate change. Pages 183-222 in D.L. Peterson, J.M. Vose, and T. Patel-Weynand (eds.), *Climate Change and United States Forests*. Springer, Dordrecht, The Netherlands.
- Ojima, D.S., L.R. Iverson, B.L. Sohngen, J.M. Vose, C.W. Woodall, G.M. Domke, D.L. Peterson, J.S. Littell, S.N. Matthews, A.M. Prasad, M.P. Peters, G.W. Yohe, and M. M. Friggens. 2014. Risk assessment. Pages 233-244 in D.L. Peterson, J.M. Vose, and T. Patel-

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- Patel-Weynand, T., D.L. Peterson, and J.M. Vose. 2014. Research and assessment in the twenty-first century. Pages 247-252 in D.L. Peterson, J.M. Vose, and T. Patel-Weynand (eds.), *Climate Change and United States Forests*. Springer, Dordrecht, The Netherlands.
- Peterson, D.L. 2014. Fire in Mediterranean Ecosystems: Ecology, Evolution and Management. Book review. *Fire Ecology* 10:86-87.
- Peterson, D.L. 2014. Vegetation Fires and Global Change. Book review. *Fire Ecology* 10:84-85.
- Peterson, D.L. and K.W. Marcinkowski. 2014. Recent changes in climate and forest ecosystems. Pages 3-11 in D.L. Peterson, J.M. Vose, and T. Patel-Weynand (eds.), *Climate Change and United States Forests*. Springer, Dordrecht, The Netherlands.
- Peterson, D.L., J.W. Wolken, T.N. Hollingsworth, C.P. Giardina, J.S. Littell, L.A. Joyce, C.W. Swanston, S.D. Handler, L.E. Rustad, and S.G. McNulty. 2014. Regional highlights of climate change. Pages 113-148 in D.L. Peterson, J.M. Vose, and T. Patel-Weynand (eds.), *Climate Change and United States Forests*. Springer, Dordrecht, The Netherlands.
- Peterson, D.L., J.M. Vose, and T. Patel-Weynand. 2014. *Climate Change and United States Forests*. Springer, Dordrecht, The Netherlands.
- Raymond, C.L., D.L. Peterson, and R.M. Rochefort (eds.). 2014. Climate change vulnerability and adaptation in the North Cascades region. USDA Forest Service General Technical Report PNW-GTR-892. Pacific Northwest Research Station, Portland, OR.
- Daniels, A., N. Shaw, D.L. Peterson, K. Nislow, M. Tomosy, and M. Rowland. 2014. Facing climate change in forests and fields. *The Wildlife Professional* 8(1):31-35
- Albright, W.L. and D.L. Peterson. 2013. Tree growth and climate in the Pacific Northwest, USA: a broad-scale analysis of changing growth environments. *Journal of Biogeography* 40:2119-2133.
- Raymond, C.L., D.L. Peterson, and R.M. Rochefort. 2013. The North Cascadia Adaptation Partnership: a science-management collaboration for responding to climate change. *Sustainability* 5:136-159.
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- Sample, V.A., J.E. Halofsky, and D.L. Peterson. 2013. US strategy for forest management adaptation to climate change: building a framework for decision making. *Annals of Forest Science* DOI 10.1007/s13595-013-0288-6.

- Hudec, J.L. and D.L. Peterson. 2012. Fuel variability following wildfire in forests with mixed severity fire regimes, Cascade Range, USA. 2012. *Forest Ecology and Management* 277:11-24.
- Littell, J.S., D.L. Peterson, C.I. Millar, and K. O'Halloran. 2012. U.S. national forests adapt to climate change through science-management partnerships. *Climatic Change* 110:269-296.
- Vose, J., D.L. Peterson, and T. Patel-Weynand. 2012. Effects of climatic variability and change on forest ecosystems: a comprehensive science synthesis for the U.S. forest sector. USDA Forest Service General Technical Report PNW-GTR-870.
- Chmura, D.J., P.D. Anderson, G.T. Howe, C.A. Harrington, J. Halofsky, D.L. Peterson, D.C. Shaw, and B. St. Clair. 2011. Forest responses to climate change in the northwestern United States: ecophysiological foundations for adaptive management. *Forest Ecology and Management* 261:1121-1142.
- Ettl, G. J. and D.L. Peterson. 2011. The growth response of conifers to past climate and potential for adaptation to climatic change in the Pacific Northwest, USA. In *Strategy of Development on Forest Genetic Resources against Climate Change, International Symposium, Suwon, Korea, June 2011*.
- Halofsky, J.E., D.C. Donato, D.E. Hibbs, J.L. Campbell, M. Donaghy-Cannon, J.B. Fontaine, J.R. Thompson, R.G. Anthony, B.T. Bormann, L.J. Kayes, D.L. Peterson, and T.A. Spies. 2011. Mixed-severity fire regimes: lessons from the Klamath-Siskiyou ecoregion. *Ecosphere* 2(4):art40. doi: 10.1890/ES10-00184.1.
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- Halofsky, J.E., D.L. Peterson, K. O'Halloran, and C. Hawkins Hoffman. 2011. Adapting to climate change at Olympic National Forest and Olympic National Park. USDA Forest Service General Technical Report PNW-GTR-844. Pacific Northwest Research Station, Portland, OR.
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- Case, M.J. and D.L. Peterson. 2007. Growth-climate relations of lodgepole pine in the North Cascades National Park, Washington. *Northwest Science* 81:62-75.
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