

CURRICULUM VITAE

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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

Alexander, M.E., M.G. Cruz, N.M. Vaillant, and D.L. Peterson. Towards a crown fire synthesis: what would you like to know and what might you be able to contribute? In *Proceedings of 3rd Fire Behavior and Fuels Conference, October 25-29, 2010, Spokane, Washington, USA*. International Association of Wildland Fire, Birmingham, AL. In press.

Prichard, S.J. and D.L. Peterson. Evaluating fuel treatment effectiveness in the 2006 Tripod Complex fires, Washington State, USA. In *Proceedings of the VI International Conference on Forest Fire Research*.

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.

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.

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.

Halofsky, J.E., D.L. Peterson, M.J. Furniss, L.A. Joyce, C.I. Millar, and R.P. Neilson. 2011. A workshop approach to the development of climate change adaptation strategies and actions for natural resource management agencies in the U.S. *Journal of Forestry* 109:219-225.

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.

- Hilbruner, M.W. and D.L. Peterson. 2011. Forest Service wildland fire research and development: meeting the challenges of wildland fire and fuels management. USDA Forest Service General Technical Report WO-85. USDA Forest Service Research and Development, Washington, DC.
- Johnson, M.C., M.C. Kennedy, and D.L. Peterson. 2011. Simulating fuel treatment effects in dry forests of the western United States: testing the principles of a fire-safe forest. *Canadian Journal of Forest Research* 41:1018-1030.
- Lyons-Tinsley, C. and D.L. Peterson. 2011. Heterogeneity in forest structure and fuels affects fire severity in mixed conifer forest, east Cascade Range, USA. *Forest Ecology and Management*. In press.
- Peterson, D.L., C.I. Millar, L.A. Joyce, M.J. Furniss, J.E. Halofsky, R.P. Neilson, and T.L. Morelli. 2011. Responding to climate change in national forests: a guidebook for developing adaptation options. USDA Forest Service General Technical Report GTR-PNW-855.
- Peterson, D.L., C.D. Allen, J.S. Baron, D.B. Fagre, D. McKenzie, N.L. Stephenson, A.G. Fountain, J.A. Hicke, G.P. Malanson, D.S. Ojima, C.L. Tague, and P.J. van Mantgem. 2011. Response of Western mountain ecosystems to climatic variability and change: a collaborative research approach. Pages 163-190 in J. Bellant and E. Beever (eds.), *Ecological Consequences of Climate Change: Mechanisms, Conservation, and Management*. Taylor and Francis Publishing, New York, NY.
- Peterson, D.L., and D. McKenzie. 2011. Understanding and adapting to new stress complexes in forest ecosystems. In W. Rodgers (ed.), *Climate Change: A Reader*. Carolina Academic Press, Durham, NC. In press.
- Peterson, D.L., J. Halofsky, and M.C. Johnson. 2011. Managing and adapting to changing fire regimes in a warmer climate. Pages 249-267 in D. McKenzie, C. Miller, and D. Falk (eds.), *The Landscape Ecology of Fire*. Springer, New York.
- Deal, R.L., C. Raymond, D.L. Peterson, and C. Glick. 2010. Ecosystem services and climate change: understanding the differences and identifying opportunities for carbon sequestration. Pages 9-25 in T.B. Jain and R.T. Graham (eds.), *Integrated Management of Carbon Sequestration and Biomass Utilization Opportunities in a Changing Climate: Proceedings of the 2009 Silviculture Workshop*. USDA Forest Service Proceedings RMRS-P-61. Rocky Mountain Research Station, Fort Collins, CO.
- Peterson, D.L. 2010. Managing fire and fuels in a warmer climate. *Northwest Woodlands* 26:16-17, 28-29.
- Peterson, D.L. and C. Lyons-Tinsley. 2010. Raising the bar in fire ecology: *Fire Ecology in Rocky Mountain Landscapes*. Book review. *Ecology* 91:2186-2187.

- Prichard, S.J., D.L. Peterson, and K. Jacobsen. 2010. Fuel treatments alter the effects of wildfire in dry mixed-conifer forest, Cascade Range, USA. *Canadian Journal of Forest Research* 40:1615-1626.
- Prichard, S.J., W.W. Oswald, Z. Gedalof, and D.L. Peterson. 2009. Holocene fire and vegetation dynamics in a montane forest, North Cascade Range, Washington, USA. *Quaternary Research* 72:57-67.
- Blate, G.M., L.A. Joyce, S. Julius, J.S. Littell, S.G. McNulty, C.I. Millar, S.C. Moser, R.P. Neilson, K. O'Halloran, D.L. Peterson and J. West. 2009. Adapting to climate change in United States national forests. *Unasylva* 60:57-62.
- Furniss, M.J., C.I. Millar, D.L. Peterson, L.A. Joyce, R.P. Neilson, J.E. Halofsky, and B.K. Kerns. 2009. Adapting to climate change: a short course for land managers. USDA Forest Service General Technical Report PNW-GTR-789. Pacific Northwest Research Station, Portland, OR. DVD, and online at <http://www.fs.fed.us/ccrc/hjar>.
- Joyce, L.A., G.M. Blate, J.S. Littell, S.G. McNulty, C.I. Millar, S.C. Moser, R.P. Neilson, and D.L. Peterson. 2009. Managing for multiple resources under climate change. *Environmental Management* 44:1022-1032.
- Keeley, J.E., G. Aplet, N.L. Christensen, S.G. Conard, E.A. Johnson, P.N. Omi, D.L. Peterson, and T.W. Swetnam. 2009. Ecological foundations for fire management in North America. USDA Forest Service General Technical Report PNW-GTR-779.
- Kopper, K.E., D. McKenzie, and D.L. Peterson. 2009. The evaluation of meta-analysis techniques for quantifying prescribed fire effects on fuel loadings. USDA Forest Service Research Paper PNW-RP-582. Pacific Northwest Research Station, Portland, OR.
- Littell, J. and D. Peterson. 2009. Pacific Northwest forests and climate. *Western Forester* 54:1-5.
- Peterson, D.L., J.K. Agee, G.H. Aplet, D.P. Dykstra, R.T. Graham, J.F. Lehmkuhl, D.S. Pilliod, D.F. Potts, R.F. Powers, and J.D. Stuart. 2009. Effects of timber harvest following wildfire in western North America: issues and scientific evidence. USDA Forest Service General Technical Report PNW-GTR-776. Pacific Northwest Research Station, Portland, OR.
- Baron, J.S., C. Tague, L. Christensen, N. Stephenson, C. Allen, D. Fagre, D. Peterson, and D. McKenzie. 2009. Addressing the vulnerability of Western mountain ecosystems and water resources to climate change with RHESSys, the Regional Hydro-Ecological Simulation System. Page 3 in S.R. Brady (ed.), Proceedings of the Second All-USGS Modeling Conference – Painting the Big Picture. U.S. Geological Survey Scientific Investigations Report 2009-5013. Online at <http://pubs.usgs.gov/sir/2009/5013>.
- Johnson, M.C., D.L. Peterson, and C. Raymond. 2009. Fuel treatment guidebook: illustrating treatment effects on fire hazard. *Fire Management Today* 69:29-33.

- Littell, J.S., D. McKenzie, D.L. Peterson, and A.L. Westerling. 2009. Climate and wildfire area burned in western U.S. ecoregions, 1916-2003. *Ecological Applications* 19:1003-1021.
- McKenzie, D., D.L. Peterson, and J. Littell. 2009. Global warming and stress complexes in forests of western North America. Pages 317-337 in A. Bytnerowicz, M.J. Arbaugh, A.R. Riebau, and C. Andersen (eds.), *Wildland Fires and Air Pollution*. Elsevier Publishers, The Hague, Netherlands.
- Joyce, L.A., G.M. Blate, J.S. Littell, S.G. McNulty, C.I. Millar, S.C. Moser, R.P. Neilson, K. O'Halloran, and D.L. Peterson. 2008. National Forests. Pages 3-1 to 3-127 in *Preliminary Review of Adaptation Options for Climate-Sensitive Ecosystems and Resources*. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research (S.H. Julius and J.M. West [eds.], J.S. Baron, B. Griffith, L.A. Joyce, P. Kareiva, B.D. Keller, M.A. Palmer, C.H. Peterson, and J.M. Scott [authors]). U.S. Environmental Protection Agency, Washington, DC.
- Kellogg, L-K.B., McKenzie, D., D.L. Peterson, and A.E. Hessl. 2008. Spatial models for inferring topographic controls on historical low-severity fire in the eastern Cascade Range of Washington, USA. *Landscape Ecology* 23:227-240.
- Littell, J.S., D.L. Peterson, and M. Tjoelker. 2008. Douglas-fir growth in mountain ecosystems: water limits tree growth from stand to region. *Ecological Monographs* 78:349-368.
- Malanson G.P., D.R. Butler, D.B. Fagre, S.J. Walsh, D.F. Tomback, L.D. Daniels, L.M. Resler, W.K. Smith, D.J. Weiss, D.L. Peterson, A.G. Bunn, C.A. Hiemstra, D. Liptzin, P.S. Bourgeron, Z. Shen, and C.I. Millar. 2007. Alpine treeline of western North America: linking organism-to-landscape dynamics. *Physical Geography* 28:378-396.
- Peterson, D.L. 2008. A book worth crowing about: *In the Company of Crows and Ravens*. Book review. *Northwest Science* 82:243.
- 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.
- Cushman, S.A., D. McKenzie, D.L. Peterson, J. Littell, and K. McKelvey. 2007. Research agenda for integrated landscape modeling. USDA Forest Service General Technical Report RMRS-GTR-194. Rocky Mountain Research Station, Fort Collins, CO.
- Gavin, D.G., D.J. Hallett, F.S. Hu, K.P. Lertzman, S.J. Prichard, K.J. Brown, J.A. Lynch, P.J. Bartlein, and D.L. Peterson. 2007. Forest fire and climate change in western North America: Insights from sediment charcoal records. *Frontiers in Ecology and the Environment* 5:499-506.
- Johnson, M.C., D.L. Peterson, and C.L. Raymond. 2007. Guide to fuel treatments in dry forests of the western United States: assessing forest structure and fire hazard. USDA

- Forest Service General Technical Report PNW-GTR-686. Pacific Northwest Research Station, Portland, OR.
- Johnson, M.C., D.L. Peterson, and C.L. Raymond. 2007. Managing forest structure and fire hazard – a tool for planners. *Journal of Forestry* 105:77-83.
- Peterson, D.L. (ed.). 2007. Characterizing and classifying complex fuels – a new approach. *Canadian Journal of Forest Research*, Special Feature.
- Peterson, D.L., L. Evers, B. Gravenmier, and E. Eberhardt. 2007. A consumer guide: tools to manage vegetation and fuels. USDA Forest Service General Technical Report PNW-GTR-690. Pacific Northwest Research Station, Portland, OR.
- Peterson, D.L. and M.C. Johnson. 2007. Science-based strategic planning for hazardous fuel treatment. *Fire Management Today* 67:13-18.
- Cushman, S.A., D. McKenzie, D.L. Peterson, J. Littell, and K. McKelvey. 2006. Research agenda for integrated landscape modeling. In 21st Annual Symposium of the United States Regional Chapter of the International Association for Landscape Ecology, March 28-31, San Diego, CA.
- Holman, M.L. and D.L. Peterson. 2006. Sensitivity of forest growth to climatic variability in the Olympic Mountains, Washington. *Canadian Journal of Forest Research* 36:92-104.
- Nakawatase, J.M. and D.L. Peterson. 2006. Spatial and temporal variability in forest growth-climate relationships in the Olympic Mountains, Washington. *Canadian Journal of Forest Research* 36:77-91.
- Peterson, D.L. and J. Littell. 2006. Biological change in the global greenhouse – *Climate Change and Biodiversity*. Book review. *Conservation Biology* 20:255.
- Stephenson, N., C. Allen, J. Baron, D. Fagre, D. McKenzie, D. Peterson, and K. O'Brian. 2006. Response of Western mountain ecosystems to climatic variability and change: the Western Mountain Initiative. *Park Science* 24:24-29.
- Tyler, M.W. and D.L. Peterson. 2006. Vascular plant species diversity in low-elevation coniferous forests of the western Olympic Peninsula: a legacy of land use. *Northwest Science* 80:224-238.
- Case, M.J. and D.L. Peterson. 2005. Fine-scale variability in growth-climate relationships of Douglas-fir, North Cascade Range, Washington. *Canadian Journal of Forest Research* 35:2743-2755.
- Elman E. and D.L. Peterson. 2005. Effects of post-harvest treatments on high-elevation forests in the North Cascade Range, Washington. *Journal of Ecosystems and Management* 6:33-50.

- Gedalof, Z., P. Mote, D. McKenzie, and D.L. Peterson. 2005. Top-down controls on wildfire in the American West. Pages 33-43 in L. Taylor, J. Zelnik, S. Cadwallader, and B. Hughes (eds.), *Mixed Severity Fire Regimes: Ecology and Management*. Washington State University Cooperative Extension, Pullman, WA.
- Johnson, M.C. and D.L. Peterson. 2005. Forest fuel treatments in western North America: merging silviculture and fire management. *Forestry Chronicle* 81:365-368.
- Littell, J. and D.L. Peterson. 2005. A method for estimating vulnerability of Douglas-fir growth to climate change in the northwestern U.S. *Forestry Chronicle* 81:369-374.
- Peterson, D.L. M.C. Johnson, J.K. Agee, T.B. Jain, D.M. McKenzie, and E.R. Reinhardt. 2005. Forest structure and fire hazard in dry forests of the western United States. USDA Forest Service General Technical Report PNW-GTR-628. Pacific Northwest Research Station, Portland, OR.
- Raymond, C.L. and D.L. Peterson. 2005. Fuel treatments alter the effects of wildfire in a mixed-evergreen forest, Oregon, USA. *Canadian Journal of Forest Research* 35:2981-2995.
- Strom, A., R.C. Francis, N.J. Mantua, E.L. Miles, and D.L. Peterson. 2005. Preserving low-frequency climate signals in growth records of geoduck clams (*Panopea abrupta*). *Palaeogeography, Palaeoclimatology, Palaeoecology* 228:167-178.
- Raymond, C.L. and D.L. Peterson. 2005. How did prefire treatments affect the Biscuit Fire? *Fire Management Today* 65:18-22.
- Fagre, D.B., S.W. Running, R.E. Keane, and D.L. Peterson. 2004. Assessing climate change effects on mountain ecosystems using integrated models: a case study. Pages 455-466 in H. Bugmann and U. Huber (eds.), *Global Change and Mountain Regions: A State-of-Knowledge Overview*. Kluwer Academic Publishing, Dordrecht, The Netherlands.
- Gedalof, Z. D.L. Peterson, and N.J. Mantua. 2004. Atmospheric, climatic and ecological controls on extreme wildfire years in the northwestern United States. *Ecological Applications* 15:154-174.
- Gedalof, Z. D.L. Peterson, and N.J. Mantua. 2004. Columbia River flow and drought since 1750. *Journal of the American Water Resources Association* 40:1579-1592.
- Hessl, A.E., C. Milesi, M.A. White, D.L. Peterson, and R.E. Keane. 2004. Ecophysiological parameters for Pacific Northwest trees. USDA Forest Service General Technical Report PNW-GTR-618. Pacific Northwest Research Station, Portland, OR.
- Hessl, A.E. and D.L. Peterson. 2004. Interannual variability in aboveground tree growth in Stehekin River Watershed, North Cascade Range, Washington. *Northwest Science* 78:204-213.

- McKenzie, D., Z. Gedalof, D.L. Peterson, and P. Mote. 2004. Climatic change, wildfire, and conservation. *Conservation Biology* 18:890-902.
- Peterson, D.L., J.L. Innes, and K. O'Brian. 2004. Climate change, carbon, and forestry in northwestern North America. USDA Forest Service General Technical Report PNW-GTR-614. Pacific Northwest Research Station, Portland, OR.
- Strom, A., R.C. Francis, N.J. Mantua, E.L. Miles, and D.L. Peterson. 2004. North Pacific climate recorded in growth rings of geoduck clams: a new tool for paleoenvironmental reconstruction. *Geophysical Research Letters* 31: L0626, doi:10.1029/2004GL019440.
- Edmonds, R.L., R.C. Francis, N.J. Mantua, and D.L. Peterson. 2003. Sources of climatic variability in river ecosystems. Pages 11-37 in R.C. Wissmar and P.A. Bisson (eds.), *Strategies for Restoring River Ecosystems: Sources of Variability and Uncertainty in Natural and Managed Systems*. American Fisheries Society, Bethesda, MD.
- Elman, E. and D.L. Peterson. 2003. Post-harvest regeneration of high-elevation forests in northern Washington, USA. *Forestry Chronicle* 79:268-272.
- Fagre, D.B., D.L. Peterson, and A.E. Hessler. 2003. Taking the pulse of mountains: ecosystem responses to climatic variability. *Climatic Change* 59:263-282.
- McKenzie, D., D.W. Peterson, and D.L. Peterson. 2003. Predicting conifer species distribution in mountain forests of Washington state, USA. *Forestry Chronicle* 79:253-258.
- McKenzie, D., D.W. Peterson, D.L. Peterson, and P.E. Thornton. 2003. Climatic and biophysical controls on conifer species distributions in mountain forests of Washington state, USA. *Journal of Biogeography* 30:1093-1108.
- McKenzie, D., S.J. Prichard, A.E. Hessler, and D.L. Peterson. 2003. Empirical approaches to modeling wildland fire in the Pacific Northwest region of the United States: methods and application to landscape simulation. Pages 85-97 in A. Perera and L. Buse (eds.), *Emulating Natural Forest Landscape Disturbances*. Columbia University Press, New York.
- Mote, P.W., E.A. Parson, A.F. Hamlet, W.S. Keeton, D. Lettenmaier, N. Mantua, D.W. Peterson, D.L. Peterson, R. Slaughter, and A.K. Snover. 2003. Preparing for climatic change: the water, salmon, and forests of the Pacific Northwest. *Climatic Change* 61:45-88.
- Sanscrainte, C.L. and D.L. Peterson. 2003. Carbon storage in subalpine tree islands, North Cascade Range, Washington. *Northwest Science* 77:255-268.
- Sanscrainte, C.L. and D.L. Peterson. 2003. Carbon storage and soil properties in late-successional and second-growth subalpine forests in the North Cascade Range, Washington. *Northwest Science* 77:297-307.

- Tyler, M.W. and D.L. Peterson. 2003. Effects of forest policy on landscape pattern of late-seral forest of the western Olympic Peninsula, Washington. *Agriculture, Ecosystems and Environment* 101:289-306.
- Fagre, D.B. and D.L. Peterson. 2002. Modeling and monitoring ecosystem responses to climate change in three North American mountain ranges. Pages 249-259 in C. Körner and E. Spehn (eds.), *Global Mountain Biodiversity: Changes and Threats*. Springer-Verlag, Berlin.
- Gedalof, Z., N.J. Mantua, and D.L. Peterson. 2002. A multi-century perspective of variability in the Pacific Decadal Oscillation: new insights from tree rings and coral. *Geophysical Research Letters* 29:2204-2207.
- Peterson, D.W., D.L. Peterson, and G.J. Ettl. 2002. Growth responses of subalpine fir (*Abies lasiocarpa*) to climatic variability in the Pacific Northwest. *Canadian Journal of Forest Research* 32:1503-1517.
- Diaz-Avalos, C., D.L. Peterson, E. Alvarado C., S.A. Ferguson, and J.E. Besag. 2001. Space-time modelling of lightning-caused forest fires in the Blue Mountains, Oregon. *Canadian Journal of Forest Research* 31:1579-1593.
- Ettl, G.J. and D.L. Peterson. 2001. Genetic variation of subalpine fir (*Abies lasiocarpa*) in Olympic National Park, WA, USA: differentiation in response to an elevation gradient. *Silvae Genetica* 50:145-153.
- McKenzie, D., A.E. Hessler, and D.L. Peterson. 2001. Recent growth in conifer species of western North America: assessing spatial patterns of radial growth trends. *Canadian Journal of Forest Research* 31:526-538.
- Norheim, R.A. and D.L. Peterson. 2001. Vegetation mapping for San Juan Island National Historical Park, Washington. In *Proceedings, Environmental Systems Research Institute 2001 User Conference*, San Diego, CA.
- Peterson, D.L. and R.D. Hammer. 2001. From open to closed canopy: a century of change in a Douglas-fir forest, Orcas Island, Washington. *Northwest Science* 75:262-269.
- Peterson, D.W. and D.L. Peterson. 2001. Mountain hemlock growth responds to climatic variability at annual and decadal scales. *Ecology* 82:3330-3345.
- Rochefort, R.M. and D.L. Peterson. 2001. Genetic and morphologic variation in *Phyllodoce empetriflora* and *P. glanduliflora* (Ericaceae) in Mount Rainier National Park, Washington. *Canadian Journal of Botany* 79:179-191.
- Schmoldt, D.L. and D.L. Peterson. 2001. Strategic and tactical planning for managing national park resources. Pages 67-79 in D.L. Schmoldt, J. Kangas, G. Mendoza, and M. Pesonen (eds.), *The Analytic Hierarchy Process in Natural Resource and Environmental Decision Making*. Kluwer Academic Publishing, Dordrecht, The Netherlands.

- Schmoldt, D.L. and D.L. Peterson. 2001. Efficient group decision making in workshop settings. Pages 97-114 in D.L. Schmoldt, J. Kangas, G. Mendoza, and M. Pesonen (eds.), *The Analytic Hierarchy Process in Natural Resource and Environmental Decision Making*. Kluwer Academic Publishing, Dordrecht, The Netherlands.
- Sullivan, T.J., D.L. Peterson, C.L. Blanchard, S.J. Tannenbaum, K. Savig, and D. Morse. 2001. Assessment of air quality and air pollutant impacts in Class I national parks of California. National Park Service, Air Resources Division, Denver, CO.
- Cooper, S.M. and D.L. Peterson. 2000. Tropospheric ozone distribution in western Washington. *Environmental Pollution* 107:339-347.
- Fagre, D.B. and D.L. Peterson. 2000. Ecosystem dynamics and disturbance in mountain wildernesses: assessing vulnerability of natural resources to change. Pages 74-91 in D.N. Cole and S.F. McCool (eds.), *Wilderness Science in a Time of Change*. USDA Forest Service Proceedings RMRS-P-15-VOL-3. Rocky Mountain Research Station, Ogden, UT.
- McKenzie, D., D.L. Peterson, and J.K. Agee. 2000. Spatial variation in fire frequency in the Interior Columbia River Basin. *Ecological Applications* 10:1497-1516.
- McKenzie, D., D.L. Peterson, and J.K. Agee. 2000. Spatial variation in fire frequency in the Interior Columbia River Basin. Pages 257-263 in L.F. Neuenschwander and K.C. Ryan (eds.), *Proceedings of the 1999 Joint Fire Science Conference and Workshop*. University of Idaho, Moscow.
- Norheim, R.A., D.L. Peterson, T.Z. Alcock, and N.R. Chrisman. 2000. Metadata SWAT teams: a success story in creating a regional clearinghouse node. In Proceedings, Environmental Systems Research Institute 2000 User Conference, San Diego, CA.
- Peterson, D.L. 2000. Monitoring air quality in mountains: designing an effective network. *Environmental Monitoring and Assessment* 64:81-91.
- Peterson, D. L. and Schmoldt, D. L. 2000. Research and management issues in large-scale fire modeling. In H. Salminen, J. Saarikko, and W. Virtanen, (eds.), *Proceedings Resource Technology '98 Nordic*. Finnish Forest Research Institute, Research Paper 791, Vantaa, Finland.
- Peterson, D.L., S.J. Prichard, and D. McKenzie. 2000. Disturbance in mountain forests. Pages 51-58 in M.F. Price and N. Butt (eds.), *Forests in Sustainable Mountain Development*. CABI Publishing, Wallingford, UK.
- Prichard, S.J., D.L. Peterson, and R.D. Hammer. 2000. Soil carbon storage in subalpine forest ecosystems of the Olympic Mountains. *Soil Science Society of America Journal* 64:1834-1845.
- Schmoldt, D.L. and D.L. Peterson. 2000. Analytical group decision making in natural resources: methodology and application. *Forest Science* 46:62-75.

- Arbaugh, M.J., D.L. Peterson, and P.R. Miller. 1999. Air pollution effects on growth of ponderosa pine, Jeffrey pine, and bigcone Douglas-fir. Pages 179-207 in P.R. Miller and J. McBride (eds.), *Oxidant Air Pollution Impacts in the Montane Forests of Southern California: The San Bernardino Mountains Case Study*. Springer-Verlag, New York.
- Brace, S., D.L. Peterson, and D. Bowers. 1999. A guide to ozone injury in vascular plants of the Pacific Northwest. USDA Forest Service General Technical Report GTR-PNW-446. Pacific Northwest Research Station, Portland, OR.
- Norheim, R.A., D.L. Peterson, N.R. Chrisman, T.Z. Alcock, and E.G. Schreiner. 1999. Developing an NSDI and NBII clearinghouse node for the Olympic Peninsula, Washington State. In Proceedings of the American Congress on Surveying and Mapping Annual Convention. American Congress on Surveying and Mapping, Bethesda, MD.
- Peterson, D.L. 1999. Conservation Biology Principles for Forested Landscapes. Book review. *Northwest Science* 73:63-64.
- Peterson, D.L. 1999. Wildfire, forest fire, grass fire. Pages 700-701 in D.E. Alexander and R.W. Fairbridge (eds.), *Encyclopedia of Environmental Science*. Kluwer Academic Publishers, Dordrecht, The Netherlands.
- Peterson, D.L. 1999. Yellowstone and the Biology of Time. Book review. *Northwest Science* 73:138-139.
- Peterson, D.L. 1999. Yellowstone and the Biology of Time. Book review. *Park Science* 19:12-13.
- Peterson, D.L. and D.L. Schmoltdt. 1999. Using analytical tools for decision making and program planning in natural resources: breaking the fear barrier. Pages 256-262 in D. Harmon (ed.), *On the Frontiers of Conservation*. George Wright Society, Hancock, MI.
- Peterson, D.L., D. Bowers, and S. Brace. 1999. Tropospheric ozone in the Nisqually River drainage, Mount Rainier National Park. *Northwest Science* 73:241-254.
- Peterson, D.L., D.G. Silsbee, and K.T. Redmond. 1999. Long-term hydrological patterns at Crater Lake, Oregon. *Northwest Science* 138:121-130.
- Schmoltdt, D.L., D.L. Peterson, R.E. Keane, J.M. Lenihan, D. McKenzie, D.R. Weise, and D.V. Sandberg. 1999. Assessing the effects of fire disturbance on ecosystems: a scientific agenda for research and management. USDA Forest Service General Technical Report GTR-PNW-455. Pacific Northwest Research Station, Portland, OR.
- Zolbrod, A.N. and D.L. Peterson. 1999. Response of high-elevation forests in the Olympic Mountains to climatic change. *Canadian Journal of Forest Research* 29:1966-1978.

- Brace, S. and D.L. Peterson. 1998. Tropospheric ozone distribution in the Mount Rainier region of the Cascade Mountains, U.S.A. *Atmospheric Environment* 32:3629-3637.
- Campbell, J. and D. Peterson. 1998. Vegetation and landform database development. *Park Science* 17:18-19.
- Peterson, D.L. 1998. Climate change: potential impacts on biological systems. Pages 135-136 in P. Calow (ed.), *The Encyclopedia of Ecology and Environmental Management*. Blackwell Science, London.
- Peterson, D.L. 1998. Climate, limiting factors and environmental change in high-altitude forests of western North America. Pages 191-208 in M. Beniston and J.L. Innes (eds.), *Climatic Variability and Extremes: The Impact on Forests*. Springer-Verlag, Heidelberg, Germany.
- Peterson, D.L. 1998. Large-scale fire disturbance: from concepts to models. *Northwest Science* 72 (Special Issue):1-3.
- Peterson, D.L. (tech. ed.). 1998. Large-Scale Fire in Pacific Northwest Ecosystems. *Northwest Science* 72 (Special Issue).
- Peterson, D.L. 1998. Preserving Nature in the National Parks. Book Review. *Northwest Science* 72:234-235.
- Peterson, D.L. and V.T. Parker. 1998. Dimensions of scale in ecology, resource management, and society. Pages 499-522 in D.L. Peterson and V.T. Parker (eds.), *Ecological Scale: Theory and Applications*. Columbia University Press, New York, NY.
- Peterson, D.L. and V.T. Parker (eds.). 1998. *Ecological Scale: Theory and Applications*. Columbia University Press, New York, NY.
- Peterson, D.L., T.J. Sullivan, J.M. Eilers, S. Brace, D. Horner, K. Savig, and D. Morse. 1998. Assessment of air quality and air pollutant impacts in national parks of the Rocky Mountains and northern Great Plains. Report NPS/CCSOUW/NRTR-98/19. National Park Service, Air Resources Division, Denver, CO.
- Campbell, J. and D.L. Peterson. 1997. Integrating satellite remote sensing, GPS, and GIS for natural resources inventory and mapping. In *Proceedings of the ASPRS/ACSM/RT97 Conference*. American Society for Photogrammetry and Remote Sensing, American Congress on Surveying and Mapping, Bethesda, MD.
- Peterson, D.L., E.G. Schreiner, and N.M. Buckingham. 1997. Gradients, vegetation, and climate: spatial and temporal dynamics in mountains. *Global Ecology and Biogeography Letters* 6:7-17.
- Schmoldt, D.L. and D.L. Peterson. 1997. Incorporating social and economic desires into land management decision-making. In *Modeling Complex Systems for Environmental Decision-making*. USDA Forest Service, Washington, DC.

- Schmoltdt, D.L. and D.L. Peterson. 1997. Infusing resource management planning with analytical tools. In J. Thompson (ed.), *Ecosystem Management and Decisionmaking*. USDA Forest Service, Fort Collins, CO.
- Schmoltdt, D.L. and D.L. Peterson. 1997. Using the AHP in a workshop setting to elicit and prioritize fire research needs. In *Proceedings of the ASPRS/ACSM/RT97 Conference. American Society for Photogrammetry and Remote Sensing, American Congress on Surveying and Mapping, Bethesda, MD.*
- Brace, S., D.L. Peterson, D. Horner, M.D. Plocher, and B. Baker. 1996. Ozone injury in common plant species of the Cascade Mountains, U.S.A.: results of controlled exposures. Paper SS-II-1 in *Proceedings of the 1996 Annual Meeting of the Pacific Northwest International Section of the Air and Waste Management Association*. Pacific Northwest International Section, Air and Waste Management Association, Seattle, WA.
- Cooper, S. and D.L. Peterson. 1996. Assessing tropospheric ozone in western Washington. Paper SS-II-2 in *Proceedings of the 1996 Annual Meeting of the Pacific Northwest International Section of the Air and Waste Management Association*. Pacific Northwest International Section, Air and Waste Management Association, Seattle, WA.
- Klimas, C.V. and D.L. Peterson. 1996. Restoration priorities for the future: science, culture and management. Pages 216-219 in D.L. Peterson and C.V. Klimas, *The Role of Restoration in Ecosystem Management*. Society for Ecological Restoration, Madison, WI.
- McKenzie, D., D.L. Peterson, and E. Alvarado. 1996. Extrapolation problems in modeling fire effects at large spatial scales: a review. *International Journal of Wildland Fire* 6:165-176.
- McKenzie, D., D.L. Peterson, and E. Alvarado. 1996. Predicting the effect of fire on large-scale vegetation patterns in North America. USDA Forest Service Research Paper PNW-489. Pacific Northwest Research Station, Portland, OR.
- Olson, R.L., D.L. Schmoltdt, and D.L. Peterson. 1996. A qualitative simulation framework in Smalltalk based on fuzzy arithmetic. Pages 189-200 in M.Köhl and G.Z. Gertner (eds.), *Caring for the Forest: Research in a Changing World--Statistics, Mathematics and Computers*. Swiss Federal Institute for Forest, Snow and Landscape Research, Birmensdorf.
- Peterson, D.L. 1996. Understanding natural resources through research in parks and protected areas. Pages 417-434 in R.G. Wright (ed.), *National Parks and Protected Areas*. Blackwell Press, Cambridge, MA.
- Peterson, D.L. and C. Klimas (eds.). 1996. *The Role of Restoration in Ecosystem Management*. Society for Ecological Restoration, Madison, WI.

- Rocheffort, R.M. and D.L. Peterson. 1996. Temporal and spatial distribution of trees in subalpine meadows of Mount Rainier National Park. *Arctic and Alpine Research* 28:52-59.
- Brace, S. and D.L. Peterson. 1995. Spatial patterns of ozone exposure in Mt. Rainier National Park. In *Proceedings of the Meeting of the Air and Waste Management Association*. AWMA, Pacific Northwest Chapter, Spokane, WA.
- Brace, S. and D.L. Peterson. 1995. Summary of ozone monitoring at Mount Rainier National Park using passive ozone samplers during summer 1994. Pages 92-102 in N. Maykut (ed.), *Ozone in the Pacific Northwest: What We Know and What We Need to Know*. Puget Sound Air Pollution Control Agency, Seattle, WA.
- Ettl, G.J. and D.L. Peterson. 1995. Extreme climate and variation in tree growth: individualistic response in subalpine fir (*Abies lasiocarpa*). *Global Change Biology* 1: 231-241.
- Ettl, G.J. and D.L. Peterson. 1995. Growth response of subalpine fir (*Abies lasiocarpa*) to climate in the Olympic Mountains, Washington, USA. *Global Change Biology* 1: 213-230.
- Little, R.L., D.L. Peterson, D.G. Silsbee, L.J. Shainsky, and L.F. Bednar. 1995. Effects of climate on radial growth of Douglas-fir (*Pseudotsuga menziesii*) in the Siskiyou Mountains, Oregon. *Canadian Journal of Forest Research* 25:724-735.
- Peterson, D.L. 1995. Air pollution effects on forest ecosystems in North America. Page 227 in E.T. LaRoe, G.S. Farris, C.E. Puckett, P.D. Doran, and M.J. Mac (eds.), *Our Living Resources*. National Biological Service, Washington, DC.
- Peterson, D.L. 1995. Book review, International Workshop on Subalpine Stone Pines and their Environment: The Status of Our Knowledge. *Mountain Research and Development* 15:191-192.
- Peterson, D.L. 1995. Subalpine forests of western North America. Pages 314-318 in E.T. LaRoe, G.S. Farris, C.E. Puckett, P.D. Doran, and M.J. Mac (eds.), *Our Living Resources*. National Biological Service, Washington, DC.
- Peterson, D.L. and D.R. Johnson. 1995. An action plan for an uncertain future in the Far North. Pages 317-322 in D.L. Peterson and D.R. Johnson (eds.), *Human Ecology and Climate Change: People and Resources in the Far North*. Taylor and Francis, Washington, DC.
- Peterson, D.L. and D.R. Johnson. 1995. Human ecology and climate change at northern latitudes. Pages 3-13 in D.L. Peterson and D.R. Johnson (eds.), *Human Ecology and Climate Change: People and Resources in the Far North*. Taylor and Francis, Washington, DC.
- Peterson, D.L. and D.R. Johnson (eds.). 1995. *Human Ecology and Climate Change: People and Resources in the Far North*. Taylor and Francis, Washington, DC.

- Peterson, D.W. and D.L. Peterson. 1995. Climatic influences on radial growth of subalpine larch in the North Cascade Mountains. Pages 268-271 in W.C. Schmidt and K.J. McDonald (eds.), *Ecology and Management of Larix Forests: A Look Ahead, Proceedings of an International Symposium*. USDA Forest Service General Technical Report GTR-INT-319. Intermountain Research Station, Logan, UT.
- Peterson, D.L., D.G. Silsbee, and D.L. Schmoltdt. 1995. A planning approach for developing inventory and monitoring programs in national parks. National Park Service Natural Resources Report NPS/NRUW/NRR-95/16. National Park Service, Natural Resources Publication Office, Denver, CO.
- Peterson, D.L., D.G. Silsbee, M. Poth, M.J. Arbaugh, and F.E. Biles. 1995. Growth response of bigcone Douglas fir (*Pseudotsuga macrocarpa*) to long term ozone exposure in southern California. *Journal of the Air and Waste Management Association* 45:36-45.
- Schmoltdt, D.L., D.L. Peterson, and R.L. Smith. 1995. The analytic hierarchy process and participatory decisionmaking. Pages 129-143 in T.C. Daniel and M. Strome (eds.), *Decision Support 2001, Proceedings of the 4th Biennial International Symposium for Advanced Technology in Natural Resource Management*. American Society of Photogrammetry and Remote Sensing, Bethesda, MD.
- Little, R.L., D.L. Peterson, and L.L. Conquest. 1994. Regeneration of subalpine fir (*Abies lasiocarpa*) following fire: effects of climate and other factors. *Canadian Journal of Forest Research* 24:934-944.
- Martinka, J.D. Peine, and D.L. Peterson. 1994. Toward a global network of mountain protected areas. Pages 422-427 in M. Beniston (ed.), *Mountain Environments in Changing Climates*. Routledge, London, UK.
- Peterson, D.L. 1994. Recent changes in the growth and establishment of subalpine conifers in western North America. Pages 234-243 in M. Beniston (ed.), *Mountain Environments in Changing Climates*. Routledge, London, UK.
- Peterson, D.W. and D.L. Peterson. 1994. Effects of climate on radial growth of subalpine conifers in the North Cascade Mountains. *Canadian Journal of Forest Research* 24:1921-1932.
- Peterson, D.L., S.S. Sackett, L.J. Robinson, and S.K. Haase. 1994. The effects of repeated prescribed burning on *Pinus ponderosa* growth. *International Journal of Wildland Fire* 4:239-247.
- Peterson, D.L., D.L. Schmoltdt, and D.G. Silsbee. 1994. A case study of resources management planning with multiple objectives and projects. *Environmental Management* 18:729-742.

- Rochefort, R.M., R.L. Little, A. Woodward, and D.L. Peterson. 1994. Changes in the distribution of subalpine conifers in western North America: a review of climate and other factors. *The Holocene* 4:89-100.
- Schmoldt, D.L., D.L. Peterson, and D.G. Silsbee. 1994. Developing inventory and monitoring projects based on multiple objectives. *Environmental Management* 18:707-727.
- Arbaugh, M.J. and D.L. Peterson. 1993. Stemwood production patterns in ponderosa pine: effects of stand dynamics and other factors. USDA Forest Service Research Paper PSW-217. Pacific Southwest Research Station, Albany, CA.
- Horner, D. and D.L. Peterson. 1993. Goat Rocks Wilderness air quality monitoring plan. Gifford Pinchot National Forest, Packwood, WA.
- Kertis, J.A., R. Gross, D.L. Peterson, M.J. Arbaugh, R.B. Standiford, and D.D. McCreary. 1993. Growth trends of blue oak (*Quercus douglasii*) in California. *Canadian Journal of Forest Research* 23:1720-1724.
- Peterson, D.L., M.J. Arbaugh, and L.J. Robinson. 1993. Effects of ozone and climate on ponderosa pine (*Pinus ponderosa*) growth in the Colorado Rocky Mountains. *Canadian Journal of Forest Research* 23:1750-1759.
- Peterson, D.L., D.L. Schmoldt, J.M. Eilers, R.W. Fisher, and R.D. Doty. 1993. Guidelines for evaluating air pollution impacts on class I wilderness areas in California. USDA Forest Service General Technical Report PSW-136. Pacific Southwest Research Station, Albany, CA.
- Peterson, D.L., D.G. Silsbee, and D.L. Schmoldt. 1993. Developing inventory and monitoring programs in national parks: a planning approach. National Park Service Natural Resources Report. National Park Service, Denver, CO.
- Peterson, D.L., A. Woodward, E.G. Schreiner, and R.D. Hammer. 1993. Global environmental change in mountain protected areas: consequences for management. Pages 29-36 in L.S. Hamilton, D.P. Bauer, and H.F. Takeuchi (eds.), *Parks, Peaks, and People*. East-West Center, Honolulu, HI.
- Rochefort, R.M. and D.L. Peterson. 1993. Genetic Resource Management Units: managing biodiversity in national parks. Pages 149-153 in *Partners in Stewardship: Seventh Conference on Research and Resource Management in Parks and On Public Lands*. George Wright Society, Hancock, MI.
- Silsbee, D.G. and D.L. Peterson. 1993. Planning for implementation of long-term resource monitoring programs. *Environmental Monitoring and Assessment* 26:177-185.
- Graybill, D.A., D.L. Peterson, and M.J. Arbaugh. 1992. Coniferous forests of the Colorado Front Range. Pages 365-401 in R.K. Olson, D. Binkley, and M. Böhm (eds.), *Response of Western Forests to Air Pollution* (Chapter 9), Springer-Verlag, New York, NY.

- Olson, R.K., D.L. Peterson, and M. Böhm. 1992. Western forests: what is their future? Pages 501-521 in R.K. Olson, D. Binkley, and M. Böhm (eds.), *Response of Western Forests to Air Pollution* (Chapter 13), Springer-Verlag, New York.
- Peterson, D.L. and M.J. Arbaugh. 1992. Mixed conifer forests of the Sierra Nevada. Pages 433-459 in R.K. Olson, D. Binkley, and M. Böhm (eds.), *Response of Western Forests to Air Pollution* (Chapter 11), Springer-Verlag, New York.
- Peterson, D.L., M.J. Arbaugh, and L.J. Robinson. 1992. Tree growth in high elevation forests of the Sierra Nevada, California, USA. Pages 269-273 in *Proceedings of the International Conference on Tree Rings and the Environment*, Ystad, Sweden. University of Lund, Lund, Sweden.
- Peterson, J., D. Schmoltdt, D. Peterson, J. Eilers, R. Fisher, and R. Bachman. 1992. Guidelines for evaluating air pollution impacts on class I wilderness areas in the Pacific Northwest. USDA Forest Service General Technical Report PNW-299. Pacific Northwest Research Station, Portland, OR.
- Peterson, D. L., A. Woodward, E. G. Schreiner, and R. D. Hammer. 1992. Identifying and managing for the potential impacts of global change in wilderness. Pages M9-1--M9-5 in A. C. Schmierer (ed.), *Threats to the National Wilderness Preservation System: The Managerial Response*. National Park Service, Denver, OR.
- Ettl, G.J. and D.L. Peterson. 1991. Growth and genetic response of subalpine fir (*Abies lasiocarpa*) in a changing environment. *The Northwest Environmental Journal* 7:357-359.
- Little, R.L. and D.L. Peterson. 1991. Effects of climate on regeneration of subalpine forests after wildfire. *The Northwest Environmental Journal* 7:355-357.
- Peterson, D.L. 1991. Sensitivity of subalpine forests in the Pacific Northwest to global climate change. *The Northwest Environmental Journal* 7:349-350.
- Peterson, D.L., M.J. Arbaugh, G.H. Pollock, and L.J. Robinson. 1991. Postfire growth of *Pseudotsuga menziesii* and *Pinus contorta* in the northern Rocky Mountains, USA. *International Journal of Wildland Fire* 1:63-71.
- Peterson, D.L., M.J. Arbaugh, and L.J. Robinson. 1991. Growth trends of ozone-stressed ponderosa pine (*Pinus ponderosa*) in the Sierra Nevada of California, USA. *The Holocene* 1:50-61.
- Peterson, D.W. and D.L. Peterson. 1991. The response of tree growth to global climate change: subalpine forests of the North Cascade Mountains. *The Northwest Environmental Journal* 7:347-348.
- Rocheftort, R.M. and D.L. Peterson. 1991. Tree establishment in subalpine meadows of Mount Rainier National Park. *The Northwest Environmental Journal* 7:354-355.

- Schmoltdt, D.L. and D.L. Peterson. 1991. Applying knowledge-based methods to design and implement an air quality workshop. *Environmental Management* 15:623-634.
- Silsbee, D.G. and D.L. Peterson. 1991. Designing and implementing long term inventory and monitoring programs. National Park Service Natural Resources Report NRR-91/04. Denver, CO.
- Peterson, D.L. and D.A. Anderson. 1990. Content of chemical elements in tree rings of lodgepole pine and whitebark pine cores from a subalpine Sierra Nevada forest. USDA Forest Service Research Paper PSW-200. Pacific Southwest Research Station, Berkeley, CA.
- Peterson, D.L., M.J. Arbaugh, L.J. Robinson, and B. Derderian. 1990. Growth trends of whitebark pine and lodgepole pine in a subalpine Sierra Nevada forest. *Arctic and Alpine Research* 22:233-243.
- Arbaugh, M.J. and D.L. Peterson. 1989. Variable selection in dendroclimatology: an example using simulated tree-ring series. *Forest Science* 35:294-302.
- Peterson, D.L. and M.J. Arbaugh. 1989. Estimating postfire survival of Douglas-fir in the Cascade Range. *Canadian Journal of Forest Research* 19:530-533.
- Peterson, D.L., M.J. Arbaugh, and M.A. Lardner. 1989. Leaf area index of a subalpine Sierra Nevada forest. *Canadian Journal of Forest Research* 19:401-403.
- Peterson, D.L., M.J. Arbaugh, and L.J. Robinson. 1989. Ozone injury and growth trends of ponderosa pine in the Sierra Nevada. Pages 293-307 in R.K. Olson and A.S. Lefohn (eds.), *Effects of Air Pollution on Western Forests*. Air and Waste Management Association, Pittsburgh, PA.
- Peterson, D.L., M.J. Arbaugh, and L.J. Robinson. 1989. The effects of ozone stress on tree growth and vigor in the Sierra Nevada of California, USA. Pages 289-294 in J. Bucher and I. Bucher-Wallin (eds.), *Proceedings of the IUFRO Conference on Air Pollution and Forest Decline*. Eidgenössische Anstalt für das forstliche Versuchswesen, Birmensdorf, Switzerland.
- Potts, D.F., D.L. Peterson, and H.R. Zuuring. 1989. Estimating postfire water production in the Pacific Northwest. USDA Forest Service Research Paper PSW-197. Pacific Southwest Research Station, Berkeley, CA.
- Peterson, D.L. and M.J. Arbaugh. 1988. Growth patterns of ozone-injured ponderosa pine (*Pinus ponderosa*) in the southern Sierra Nevada. *Journal of the Air Pollution Control Association* 38: 921-927.
- Ryan, K.C., D.L. Peterson, and E.D. Reinhardt. 1988. Modeling long-term fire-caused mortality in Douglas-fir. *Forest Science* 34:190-199.

- Peterson, D.L., M.J. Arbaugh, V.A. Wakefield, and P.R. Miller. 1987. Evidence of growth reduction in ozone-stressed Jeffrey pine (*Pinus jeffreyi* Grev. and Balf.) in Sequoia and Kings Canyon National Parks. *Journal of the Air Pollution Control Association* 37:906-912.
- Peterson, D.L. and M.J. Arbaugh. 1986. Postfire survival in Douglas-fir and lodgepole pine: comparing the effects of crown and bole damage. *Canadian Journal of Forest Research* 16:1175-1179.
- Peterson, D.L. and R.D. Hammer. 1986. Soil nutrient flux: a component of nutrient cycling in temperate forest ecosystems. *Forest Science* 32:318-324.
- Peterson, D.L. and K.C. Ryan. 1986. Modeling postfire conifer mortality for long-range planning. *Environmental Management* 10:797-808.
- Peterson, D.L. 1985. Evaluating the effects of air pollution and fire on tree growth by tree ring analysis. Pages 124-131 in L.R. Donoghue and R.E. Martin, eds., *Proceedings of the Eighth Conference on Fire and Forest Meteorology*, Detroit, MI, Society of American Foresters, Bethesda, MD.
- Peterson, D.L. 1985. Crown scorch volume and scorch height – estimates of postfire tree condition. *Canadian Journal of Forest Research* 15:596-598.
- Peterson, D.L. and G.L. Rolfe. 1985. Temporal variation in nutrient status of a floodplain forest soil. *Forest Ecology and Management* 12:73-82.
- Peterson, D.L. and F.A. Bazzaz. 1984. Photosynthetic and growth responses of silver maple (*Acer saccharinum* L.) seedlings to flooding. *American Midland Naturalist* 112:261-272.
- Peterson, D.L. and P.J. Flowers. 1984. Estimating postfire changes in production and value of northern Rocky Mountain-Intermountain rangelands. USDA Forest Service Research Paper PSW-173. Pacific Southwest Forest and Range Experiment Station, Berkeley, CA.
- Peterson, D.L. 1983. Estimating postfire timber damage with a simulation model. Pages 159-162 in *Proceedings of the Seventh Conference of Fire and Forest Meteorology*, Fort Collins, CO. American Meteorological Society, Boston, MA.
- Brown, S.L. and D.L. Peterson. 1983. The structural characteristics and production of two Illinois bottomland forests. *American Midland Naturalist* 110:107-117.
- Peterson, D.L. 1983. Predicting fire-caused mortality in four northern Rocky Mountain conifers. Pages 276-280 in *Proceedings of the Society of American Foresters National Convention*, Portland, OR. Society of American Foresters, Bethesda, MD.
- Peterson, D.L. and G.L. Rolfe. 1983. Effects of flooding on silver maple (*Acer saccharinum* L.) and American sycamore (*Platanus occidentalis* L.) seedlings: implications for biomass production. *Transactions of the Illinois State Academy of Science* 76:91-102.

- Peterson, D.L. and G.L. Rolfe. 1982. Nutrient dynamics of herbaceous vegetation in upland and floodplain forest communities. *American Midland Naturalist* 197:325-339.
- Peterson, D.L. and G.L. Rolfe. 1982. Nutrient dynamics of litterfall and decomposition in floodplain and upland forests of central Illinois. *Forest Science* 28:667-681.
- Peterson, D.L. and G.L. Rolfe. 1982. Precipitation components as nutrient pathways in floodplain and upland forests of central Illinois. *Forest Science* 28:321-332.
- Peterson, D.L. and G.L. Rolfe. 1982. Seasonal variation in soil nutrients in floodplain and upland forests of central Illinois. *Soil Science Society of America Journal* 46:1310-1315.
- Peterson, D.L. and G.L. Rolfe. 1980. Litter dynamics of a bottomland hardwood forest in southern Illinois. Pages 103-115 in *Proceedings of the Third Central Hardwood Forest Conference* (G.S. Cox and H.E. Garrett, Eds.), Columbia, MO.
- Peterson, D.L. and G.L. Rolfe. 1979. Determining sample size in throughfall studies. *Forest Science* 25:582-584.
- Peterson, D.L., G.L. Rolfe, and F.A. Bazzaz. 1979. Nutrient stability in rainfall and throughfall samples. University of Illinois Forestry Research Report 79-3.
- Peterson, D.L., G.L. Rolfe, and F.A. Bazzaz. 1979. Nutrient dynamics of letterfall and decomposition in a bottomland hardwood forest. University of Illinois Forestry Research Report 79-4.
- Peterson, D.L. and F.A. Bazzaz. 1978. Life cycle characteristics of *Aster pilosus* in early successional habitats. *Ecology* 59:1005-1013.