

CURRICULUM VITAE – PETER B. LANDRES

Aldo Leopold Wilderness Research Institute
USDA Forest Service, Rocky Mountain Research Station
790 East Beckwith, Missoula, MT 59801
Office phone: 406-542-4189, Email: plandres@fs.fed.us

EDUCATION:

Undergraduate

Lewis and Clark College, Portland, Oregon (1968-1972)

Graduate

Utah State University, Logan, Utah (1975-1981)

Degrees

B.S. - Natural Science, Lewis and Clark College (1972)

Ph.D. - Biology/Ecology, Utah State University (1981)

WORK EXPERIENCE SUMMARY:

Ecologist - Aldo Leopold Wilderness Research Institute, Missoula, Montana (1992-present)

I'm developing the knowledge, strategies, and tools to improve the ecological management of wilderness ecosystems throughout the United States. This work involves developing the conceptual bases for protecting and preserving the integrity of wilderness ecosystems, analyzing and monitoring threats to these systems, and conducting field research to validate the concepts and tools that are developed.

Assistant Professor - Natural Science Program, University of Colorado, Boulder, Colorado (1989-1992)

Assistant Professor - Biology Dept., University of Puget Sound, Tacoma, Washington (1987-1989)

Visiting Assistant Professor - Zoology Dept., University of Montana, Missoula, Montana (1986-1987)

NSF Postdoctoral Fellow - Dept. of Biology, Utah State University, Logan, Utah (1984-1986)

Adjunct Faculty - Dept. of Zoology, Weber State College, Ogden, Utah (1985)

Adjunct Faculty - Dept. of Biology, Utah State University, Logan, Utah (1983)

Ecological Consultant - Ecosystem Research Institute, Logan, Utah (1981)

HONORS/AWARDS:

USDA Forest Service National Wilderness Award for Wilderness Stewardship Research (2006)

USDA Forest Service Rocky Mountain Research Station Award for best technology transfer publication (2007)

PROFESSIONAL MEMBERSHIPS:

Ecological Society of America

Society for Conservation Biology

REFEREE/REVIEWER:

Benjamin/Cummings Publishing Company

Ecological Applications

Biological Conservation

Environmental Management

Canadian Journal of Zoology

International Journal of Wilderness

Condor

Island Press

Conservation Biology

Restoration Ecology

Ecology

PUBLICATIONS:

Landres, P.B., and J.A. MacMahon. 1980. Guilds and community organization: analysis of an oak woodland avifauna in Sonora, Mexico. 1980. *Auk* 97:351-365.

MacMahon, J.A., and **P.B. Landres**. 1981. Ornithology and ecology as sciences. *Auk* 98:639-640.

Landres, P.B. 1983. Use of the guild concept in environmental impact assessment. *Environmental Management* 7:393-398.

- Landres, P.B.**, and J.A. MacMahon. 1983. Community organization of arboreal birds in some oak woodlands of western North America. *Ecological Monographs* 53:183-208.
- Parmenter, R., et al., and **P.B. Landres**. 1985. Reclamation of surface coal mines in western Wyoming for wildlife habitat: a preliminary analysis. *Reclamation and Revegetation Research* 4:93-115.
- Landres, P.B.** 1986. Introduction: guild applications to modern management problems. Pages 48-49 in *Applications of the Guild Concept to Environmental Management* (W.D. Severinghaus, T.D. James, editors). U.S. Army Corps of Engineers, Technical Manuscript N-86/07, Champaign, Illinois.
- Hutto, R., S. Real, and **P.B. Landres**. 1987. A critical evaluation of the species approach to biological conservation. 1987. *Endangered Species Update* 4:1-4.
- Landres, P.B.**, J. Verner, and J.W. Thomas. 1988. Ecological uses of vertebrate indicator species: a critique. 1988. *Conservation Biology* 4:316-328.
- Landres, P.B.** 1992. Ecological indicators: panacea or liability? Pages 1295-1318 in *Ecological indicators, Volume 2* (D.H. McKenzie, D.E. Hyatt, V.J. McDonald, editors). Elsevier Applied Scientific Publishers, Amsterdam.
- Landres, P.B.** 1992. Temporal perspectives in managing for biological diversity. *Transactions of the North American Wildlife and Natural Resources Conference* 57:292-307.
- Landres, P.B.**, D.N. Cole, and A.E. Watson. 1994. A monitoring strategy for the National Wilderness Preservation System, USA. Pages 192-197 in *International Wilderness Allocation, Management, and Research* (J.C. Hendee, V.G. Martin, editors). International Wilderness Leadership (WILD) Foundation, Ft. Collins, CO.
- Landres, P.B.** 1995. The role of ecological inventorying and monitoring in managing wilderness. *Trends* 32:10-13.
- Cole, D.N., and **P.B. Landres**. 1996. Threats to wilderness ecosystems: impacts and research needs. *Ecological Applications* 6:168-184.
- Knight, R.L., and **P.B. Landres**, editors. 1998. *Stewardship Across Boundaries*. Island Press, Washington, D.C.
- Landres P.B.** 1998. Introduction. Pages 1-5 in *Stewardship Across Boundaries* (R.L. Knight and P.B. Landres, editors). Island Press, Washington, D.C.
- Landres P.B.** 1998. Integration: a beginning for stewardship across boundaries. Pages 337-345 in *Stewardship Across Boundaries* (R.L. Knight and P.B. Landres, editors). Island Press, Washington, D.C.
- Landres P.B.**, R.L. Knight, S.T.A. Pickett, and M.L. Cadenaso. 1998. Ecological impacts of administrative boundaries. Pages 39-64 in *Stewardship Across Boundaries* (R.L. Knight and P.B. Landres, editors). Island Press, Washington, D.C.
- Landres P.B.**, S. Marsh, L. Merigliano, D. Ritter, and A. Norman . 1998. Boundary effects on national forest wildernesses and other natural areas. Pages 117-139 in *Stewardship Across Boundaries* (R.L. Knight and P.B. Landres, editors). Island Press, Washington, D.C.

Landres P.B., P.W. White, G. Aplet, and A. Zimmermann. 1998. Naturalness and natural variability: definitions, concepts, and strategies for wilderness management. Pages 41-50 in Wilderness and Natural Areas in Eastern North America: Research, Management, and Planning (D.L. Kulhavy and M.H. Legg, editors). Center for Applied Studies in Forestry, Stephen F. Austin State University, Nacogoches, TX.

Landres P.B., and S.M. Meyer. 1998. A National Wilderness Preservation System database: key attributes and trends, 1964 through 1998. USDA Forest Service, Rocky Mountain Research Station General Technical Report RMRS-GTR-18. Fort Collins, CO.

Landres P.B., P. Morgan, and F.J. Swanson. 1999. Overview of the use of natural variability concepts in managing ecological systems. Ecological Applications 9:1179-1188.

Watson, A.W., and **P.B. Landres**. 1999. Changing wilderness values. Pages 384-388 in Outdoor Recreation in American Life: A National Assessment of Demand and Supply Needs (H.K. Cordell, editor). Sagamore Publishing, Champaign, IL.

Landres P.B. 2000. A framework for evaluating proposals for scientific activities in wilderness. Pages 239-245 in Proceedings from Wilderness Science in a Time of Change Conference, Volume 3: Wilderness as a Place for Scientific Inquiry. USDA Forest Service, Rocky Mountain Research Station Proceedings RMRS-P15-Vol-3 , Fort Collins, CO.

Landres, P.B. 2000. Wilderness monitoring: new directions and opportunities. International Journal of Wilderness 6(3):38.

Landres P.B., and S.M. Meyer. 2000. A National Wilderness Preservation System database: key attributes and trends, 1964 through 1999. USDA Forest Service, Rocky Mountain Research Stations General Technical Report RMRS-GTR-18-Revised Edition. Fort Collins, CO.

Landres P.B., M. Brunson, L. Merigliano, C. Sydoriak, and S. Morton. 2000. Naturalness and wildness: the dilemma and irony of managing wilderness. Pages 377-381 in Proceedings from Wilderness Science in a Time of Change Conference, Volume 5: Wilderness Ecosystems, Threats, and Management. USDA Forest Service, Rocky Mountain Research Station Proceedings RMRS-P15-VOL-5 , Fort Collins, CO.

Meyer, S.M., and **P.B. Landres**. 2000. A National Wilderness Preservation System database: benefits, limitations, and future needs. International Journal of Wilderness 6(April):13-18.

Miller, C.M., **P.B. Landres**, and P.B. Alaback. 2000. Evaluating risks and benefits of wildland fire at landscape scales. Pages 78-87 in Proceedings from Crossing the Millennium: Integrating Spatial Technologies and Ecological Principles for a New Age in Fire Management (L.F. Neuenschwander, K.C. Ryan, technical editors). University of Idaho, Moscow, ID.

Parsons, R., P. Morgan, and **P.B. Landres**. 2000. Applying the natural variability concept: towards desired future conditions. Pages 222-237 in Ecosystem Management of Forested Landscapes (R.G. D'Eon, J. Johnson, E.A. Ferguson, editors). University of British Columbia Press, Vancouver, BC, Canada.

Davis, J.C., G.W. Minshall, C.T. Robinson, and **P.B. Landres**. 2001. Monitoring Wilderness Stream Ecosystems. USDA Forest Service, Rocky Mountain Research Station General Technical Report RMRS-GTR-70, Fort Collins, CO. 139 pages.

Landres, P.B., D.R. Spildie, and L.P. Queen. 2001. GIS applications to wilderness management: potential uses and limitations. USDA Forest Service, Rocky Mountain Research Station General Technical Report RMRS-GTR-80. Fort Collins, CO.

- Landres, P.B.**, M. Brunson, and L. Merigliano. 2001. Naturalness and wildness: the dilemma and irony of ecological restoration in wilderness. *Wild Earth*(Winter) 10(4):77-82.
- Landres, P.B.**, S. Meyer, and S. Matthews. 2001. The Wilderness Act and fish stocking: an overview of legislation, judicial interpretation, and agency implementation. *Ecosystems* 4:287-295.
- Landres, P.B.** 2002. Ecological considerations in using prescribed fire. Pages 35-42 in National Conference on the Social Acceptability of Fuel Treatments on Western Public Lands (J. Burchfield, editor), Bolle Center for People and Forests, University of Montana, Missoula, MT.
- Knight, R.L., and **P.B. Landres**. 2002. Central concepts and issues of biological conservation. Pages 22-33 in *Concepts and Applications of Landscape Ecology to Biological Conservation* (K. Gutzwiller, editor). Springer-Verlag, New York, NY.
- Parsons, D.J., **P.B. Landres**, and C. Miller. 2003. The dilemma of managing and restoring natural fire and fuels in United States wilderness. Pages 19-26 *in* *Proceedings of Fire Conference 2000: The First National Congress of Fire Ecology, Prevention, and Management* (K.E.M. Galley, R.C. Klinger, and N.G. Sugihara, editors). Miscellaneous Publication No. 13, Tall Timbers Research Station, Tallahassee, FL.
- Landres, P.**, J. Alderson, and D.J. Parsons. 2003. The challenge of doing science in wilderness: historical, legal, and policy context. *George Wright FORUM* 20(3):42-49.
- Landres, P.** 2004. Developing indicators to monitor the “outstanding opportunities” quality of wilderness character. *International Journal of Wilderness* 10(3):8-11, 20.
- Landres, P.** 2004. Managing the wild in designated wilderness. *Frontiers in Ecology and the Environment* 9:498-499.
- Landres, P.** 2004. The Wilderness Stewardship Reference System. *International Journal of Wilderness* 10(2):34, 22.
- Miller, C., and **P. Landres**. 2004. Exploring information needs for wildland fire and fuels management. USDA Forest Service, Rocky Mountain Research Station General Technical Report, RMRS-GTR-127. Fort Collins, CO. 36 pages.
- Landres, P.** 2005. Balancing the benefits and impacts of science in Alaska’s wilderness. *Alaska Park Science* 4(2):44-46.
- Landres, P.**, S. Boutcher, L. Merigliano, C. Barns, D. Davis, T. Hall, S. Henry, B. Hunter, P. Janiga, M. Laker, A. McPherson, D.S. Powell, M. Rowan, and S. Sater. 2005. Monitoring selected conditions related to wilderness character: a national framework. USDA Forest Service Rocky Mountain Research Station General Technical Report, RMRS-GTR-151. Fort Collins, CO. 38 pages.
- Thelen, G.C., J.M. Vivanco, B. Newingham, W. Good, H.P. Bais, **P. Landres**, A. Caesar, and R.M. Callaway. 2005. Insect herbivory stimulates allelopathic exudation by an invasive plant and the suppression of natives. *Ecology Letters* 8:209-217.
- Roeper, N., **P. Landres**, and D. Fisher. 2006. The Global Wilderness Seminar for Government Agencies: a meeting at the crossroads of wildlands stewardship. *International Journal of Wilderness* 12(3):45-46.
- Landres, P.** 2006. Developing wilderness character monitoring: a personal reflection. *International Journal of Wilderness* 12(3):30-31 .

Landres, P. 2007. Update on wilderness character monitoring. *International Journal of Wilderness* 13(2):37-38.

Sharman, L.C., **P. Landres**, and S. Boudreau. 2007. Developing a framework for evaluating proposals for research in wilderness: science to protect and learn from parks. *Alaska Park Science* 6(2):100-103.

Landres, P., B. Barr, and C.F. Kormos. 2008. A comparison of international wilderness laws. Pages 31-54 in *A Handbook on International Wilderness Law and Policy* (C.F. Kormos, editor). Fulcrum Publishing, Golden, CO.

Cole, D.N., L. Yung, E.S. Zavaleta, G.H. Aplet, F.S. Chapin, D.M. Graber, E.S. Higgs, R.J. Hobbs, **P.B. Landres**, C.I. Millar, D.J. Parsons, J.M. Randall, N.L. Stephenson, K.A. Tonnessen, P.S. White, and S. Woodley. 2008. Naturalness and beyond: protected area stewardship in an era of global environmental change. *The George Wright Forum* 25(1):36-56.

Landres, P., C. Barns, J.G. Dennis, T. Devine, P. Geissler, C.S. McCasland, L. Merigliano, J. Seastrand, and R. Swain. *In press*. Keeping it Wild: An Interagency Strategy to Monitor Trends in Wilderness Character Across the National Wilderness Preservation System. 81 pages. USDA Forest Service, Rocky Mountain Research Station General Technical Report, Fort Collins, CO.

Landres, P., S. Boutcher, T. Blett, D. Bumpus, T. Carlson, D. Cole, L. Dean, T. Hall, C. Hardy, A. Leach, A. Mebane, L. Merigliano, S. Rinehart, and P. Wright. *In press*. Technical Guide for Monitoring Selected Conditions Related to Wilderness Character. 264 pages. USDA Forest Service, Government Printing Office, Washington, DC.

PROFESSIONAL PRESENTATIONS:

1982 through 2000 – 46 invited presentations and 16 offered presentations
2001 – 6 invited and 2 offered presentations
2002 – 6 invited and 3 offered presentations
2003 – 7 invited and 2 offered presentations
2004 – 13 invited and 1 offered presentations
2005 – 17 invited and 1 offered presentations
2006 – 11 invited and 2 offered presentations
2007 – 10 invited and 1 offered presentations

RESEARCH GRANTS RECEIVED:

1982 through 2000 – \$310K for 6 separate projects
2001 through 2004 – \$289K (in 5 separate grants) for 1 project
2004 through 2005 – \$199K (in 3 separate grants) for 1 project
2006 through 2007 – \$403K (in 3 separate grants) for 5 projects