

CARA RITCHIE NELSON — CURRICULUM VITAE

Department of Ecosystem and Conservation Sciences, College of Forestry and Conservation
University of Montana, 32 Campus Drive, Missoula, Montana 59812

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PROFESSIONAL PREPARATION

- Post-doctoral Fellowship.** David H. Smith Conservation Research Fellowship, Society for Conservation Biology (*Mentors: James Agee, Univ. of WA; Peter Dunwiddie and Elizabeth Gray, The Nature Conservancy*) **2005-2007**
- Ph.D. Forest Ecosystem Analysis.** College of Forest Resources, Univ. of WA. (*Advisor, Charles B. Halpern*) **2004**
- M.S. Forestry.** Department of Forest Ecology and Management, Univ. of WI-Madison. (*Advisor, Craig Lorimer*) **1997**
- M.S. Conservation Biology and Sustainable Development.** Institute for Environmental Studies, Univ. of WI-Madison. (*Advisor, Donald M. Waller*) **1997**
- B.S. Ecology Emphasis.** The Evergreen State College, Olympia, WA. **1990**

PROFESSIONAL APPOINTMENTS

- Chair,** Department of Ecosystem and Conservation Sciences, College of Forestry and Conservation, Univ. of MT **2021-PRESENT**
- Professor, Restoration Ecology,** Department of Ecosystem and Conservation Sciences, College of Forestry and Conservation, Univ. of MT **2018-PRESENT**
- Chair,** Ecosystem Restoration Thematic Group, Commission on Ecosystem Management, International Union for the Conservation of Nature **2017-PRESENT**
- Affiliate Professor,** Univ. of Concepcion, Chile **2016-PRESENT**
- Fulbright Fellow,** Univ. of Concepcion, Chile **2016-2017**
- Associate Director of Ecological Restoration,** Center for Integrated Research on the Environment, Univ. of MT **2014-2016**
- Interim Executive Director,** Society for Ecological Restoration, Wash. DC **2013-2015**
- Chair of the Board,** Society for Ecological Restoration, Washington DC **2013-2015**
- Associate Professor, Restoration Ecology,** Department of Ecosystem and Conservation Sciences, College of Forestry and Conservation, Univ. of MT **2012-2018**
- Director, Ecological Restoration Program,** Department of Ecosystem and Conservation Sciences, College of Forestry and Conservation, Univ. of MT **2007-2015**
- Assistant Professor, Restoration Ecology,** Department of Ecosystem and Conservation Sciences, College of Forestry and Conservation, Univ. of MT **2007-2012**
- Affiliate Assistant Professor,** College of the Environment, Univ. of WA **2007-2012**

ACADEMIC AND PROFESSIONAL HONORS

External Recognition

- Excellence in Wilderness Stewardship Research Award, USDA Forest Service (2016)
- Fulbright Scholarship, US Department of State (2016)
- John Rieger Award (outstanding contributions to the field), Society for Ecological Restoration (2015)

Recognition at University of Montana

- Faculty Senate Service Recognition (2021)
- Davidson Honor's College Faculty Recognition for Student Mentoring (2020, 2021)
- Outstanding Faculty Merit Awards (2009, 2011, 2013, 2015, 2017, 2019)
- Faculty Exchange Award, International Programs (2016)
- Outstanding Faculty Advisor Award (2014)
- Outstanding Faculty Service Award, Student Services (2013)
- Outstanding Faculty Service Award, College of Forestry and Conservation (2009)

COURSES TAUGHT

Universidad de Concepcion (Chile)

- *Advanced Topics in Forest Restoration* (3-credit graduate course; 2016)
- *Restauración Ecológica de Ecosistemas Forestales* (3-day professional training; 2017)

University of Montana-Missoula

- *Conservation Ecology* (NRS271; 3-credits undergraduate course; 2020-present)
- *Ecology, Conservation, and Restoration of Patagonian Mountain Ecosystems* (NRS249; 6-credit undergraduate and graduate study-abroad course; 2017-present)
- *Seminar in Ecological Restoration* (NRS249; 1-credit undergraduate course; 2011-present)
- *Restoration Ecology* (NRS246; 3-credits undergraduate/graduate course; 2010-present)
- *Ecosystem Science and Restoration Capstone* (NRS234; 5-credit undergraduate course; 2009-present)
- *14 Experiments in Ecological Restoration* (FOR 195; 1-credit undergraduate course; 2008)
- *Elements of Ecological Restoration* (NRS265; 3-credit undergraduate course; 2007-2015)
- *Advanced Problems in Restoration Ecology* (FOR 565; 3-credit graduate course; 2007-present)

University of Washington- Seattle

- *Old Growth and Forest Management* (ESC 320; 5-credit undergraduate course; 2001)

SOURCES OF FUNDING (≥ \$10,000 only)

1. *Global Forum on Ecosystem Restoration*. International Union for Conservation of Nature, Commission on Ecosystem Management. 2020-2021. \$10,000 USD. PI: **C.R. Nelson**.
2. *Assessing Ecotypic Variation to Improve Seed Transfer of Herbaceous Plants*. USDA National Institute of Food and Agriculture. 2019-2021. \$83,136 USD. PI: **C.R. Nelson**.
3. *Métodos para la restauración de la capacidad de resiliencia de bosques siempreverdes insulares del sur de Chile (Methods for restoring the resilience capacity of evergreen forests of southern Chile)*. Corporación Nacional Forestal (CONAF; Chile). 2019-2023. 68,000,000 Chilean pesos (Approx \$94,000 USD) PI: J. Bannister; Co-PI: M. Acevedo, N. Galindo, E. Villalobos V, N. Carrasco, **C.R. Nelson**, and A. Holz.
4. *Science communication in the Northern Rockies: fire, fuels, restoration, and resilience*. USDA Forest Service, Rocky Mountain Research Station. 2017-2019. \$125,500 USD. PI: **C.R. Nelson**.
5. *Conservation and restoration of endangered plants and butterflies in open pine rocklands of Florida*. Temper of the Times Foundation. 2017. \$30,000 USD. PI: **C.R. Nelson**.
6. *Assessing ecotypic variation in response to climate: seed transfer zones for restoration-relevant native plants*. USDA Forest Service, Native Plant Materials Program. 2016-2021. \$325,738 USD. PI: **C.R. Nelson**.
7. *An integrated multi-user ECOR (Environmental Control for Organismal Research) facility*. M.J. Murdock Charitable Trust. 2016-2018. \$293,630 USD. PI: Lila Fishman; Co-PI: **C.R. Nelson**.
8. *Knowledge and training to improve ecological restoration in a changing world; Increasing capacity for effective forest restoration in South America*. Fulbright Scholars Program, Science and Technology Award. 2016. \$16,000 USD. PI: **C.R. Nelson**.
9. *Faculty exchange in Concepcion, Chile*. University of Montana, International Programs. 2016. \$12,400 USD. PI: **C.R. Nelson**.
10. *Support for species recently listed under the Endangered Species Act*. US Army Corp of Engineers. 2015-2019. \$1,242,575 USD. PI: **C.R. Nelson**; Co-PIs V. Dreitz and A. Luis.
11. *Technical support for invasive species management and natural resource programs at Travis Air Force Base, CA*. 2015-2016. \$101,452 USD. PI. H. M. Valett; Co-PIs W. Lowe and **C.R. Nelson**.
12. *Assessing restoration in the Upper Clark Fork Watershed*. State of Montana, Natural Resource Damage Program. \$92,578 USD. 2015-2016. PI: **C.R. Nelson**.
13. *Implementation and monitoring of road removal projects*. \$162,227 USD. USDA Forest Service, SWCC CFLRP Program. 2015-2021. PI: **C.R. Nelson**.
14. *Restoring the Yaak River Drainage: Coordinating restoration and monitoring in a trans-boundary watershed*. Yellowstone to Yukon Conservation Initiative. 2015. \$38,000 USD. PI: **C.R. Nelson**.

15. *Collecting, analyzing, and applying resource data to implement maintenance for optimal management of public lands.* US Army Corp of Engineers. 2014-2019. \$45,000,000 USD. PI: R. Hauer; Co-PIs R. Callaway, K. Dixon, A. Holian, J. Kimball, W. Lowe, E. Metcalf, J. Mohr, **C.R. Nelson**, I. Russell, and M. Valett.
16. *Oak resilience after wildfire.* USDA Forest Service. 2014-2017. \$218,000 USD. PI: **C.R. Nelson**.
17. *Rock Creek Confluence project: Engaging students in service learning.* Montana Department of Natural Resources and Conservation and Missoula Conservation District. 2013-2014. \$15,000 USD. PI: **C.R. Nelson**.
18. *Network for systems approaches to restoration.* MT EPSCoR (National Science Foundation). 2013. \$29,000 USD. PI: J. Mohr; Co-PIs: R. Callaway, E. Metcalf, **C.R. Nelson**, M. Valett, and L. Yung.
19. *Restoring ecosystem services on the Clearwater National Forest through road reclamation.* Yellowstone to Yukon Conservation Initiative. 2013. \$10,000 USD. PI: **C.R. Nelson**.
20. *Fire analysis and interpretation.* USDA Forest Service, Rocky Mountain Research Station. 2012-2015. \$26,200 USD. PI: **C.R. Nelson**.
21. *Restoring aquatic ecosystem services on the Clearwater National Forest through integrated science and management.* Environmental Protection Agency STAR Fellowship to Rebecca A. Lloyd. 2012-2014. \$34,000 USD. PI: **C.R. Nelson**.
22. *Assessing the efficacy of collaborative forest restoration projects in the Southwestern Crown of the Continent, Montana.* National Forest and Aspenwood Foundations. 2012-13. \$70,000 USD. PI: **C.R. Nelson**; Co-PI: A. Larson.
23. *Assessing the relationship between burn severity and dNBR.* USDA Forest Service, Aldo Leopold Wilderness Research Institute. 2012. \$14,500 USD. PI: **C.R. Nelson**.
24. *Environmental change—Science, society and solutions in Rocky Mountain ecosystems.* Montana Institute on Ecosystems Incubation Grant. 2012. \$42,000 USD. PI: B. Holben; Co-PIs C. Cleveland, G. Larson, H. Löwisch, J. Mohr, H. Naughton, **C.R. Nelson**, M. Valett, and L. Yung.
25. *Drivers of forest structure and function on tribal lands of northwestern Montana: Interactions among climate, disturbance, ecosystem legacies and management.* Montana Institute of Ecosystems. 2012. \$20,000 USD. PI: D. McWethy; Co-PIs A. Leighton, **C.R. Nelson**, G. Pederson, and E. Heyerdahl.
26. *Effects of herbicide treatments on native plant cover and viability in the Southwestern Crown of the Continent, Montana.* USDA Forest Service Collaborative Forest Landscape Restoration Program. 2011-2015. \$228,000 USD. PI: **C.R. Nelson**.
27. *Efficacy and effects of forest restoration treatments in the Southwestern Crown of the Continent, Montana.* USDA Forest Service Collaborative Forest Landscape Restoration Program. 2011-2015. \$119,000 USD. PI: A. Larson; Co-PI: **C.R. Nelson**.
28. *Restoration of whitebark pine in the Southwestern Crown of the Continent, Montana.*

- USDA Forest Service Collaborative Forest Landscape Restoration Program. 2011-2015. \$23,100 USD. PI: **C.R. Nelson**; Co-PI: A. Larson.
29. *Efficacy and ecological effects of treatments to restore whitebark pine in the Northern Rocky Mountains and Inland Northwest*. USDA Forest Service, McIntire-Stennis Cooperative Forestry Research Program. 2011-2014. \$100,000 USD. PI: **C.R. Nelson**; Co-PIs: A. Larson and A. Sala.
 30. *Monitoring in the Southwest Crown of the Continent*. USDA Forest Service, Collaborative Forest Landscape Restoration Program. 2011-2012. \$85,000 USD. PI: J. Burchfield; Co-PI: **C.R. Nelson**.
 31. *Temporal trends in wildfire severity after forest restoration*. Wilburforce Foundation. 2011-2012. \$40,000 USD. PI: **C.R. Nelson**.
 32. *Assessing whitebark pine ecosystem health and successional dynamics*. USDA Forest Service, Northern Region, Forest Health and Protection Program. 2011-2012. \$15,000 USD. PI: **C.R. Nelson**.
 33. *Fire-mitigation projects: What is the probability that a treated stand will experience wildfire?* Wilburforce Foundation. 2010-2011. \$45,000 USD. PI: **C.R. Nelson**; Co-PIs: T. Schoennagel and S. Dobrowski.
 34. *Efficacy of revegetation treatments at Milltown*. Natural Resource Damage Program, MT Department of Justice. 2010-2013. \$62,000 USD. PI: **C.R. Nelson**.
 35. *Ecological Restoration Occupational Training Scholarships*, Montana AFL-CIO. 2010-2012. \$26,500 USD. PI: **C.R. Nelson**.
 36. *Ecological and social dynamics of mountain pine beetle outbreaks in Western Montana*. McIntire-Stennis Cooperative Forest Research Program. 2010-2011. \$137,000 USD. PI: C. Keyes; CO-PIs: C. Cleveland, D. Six, **C.R. Nelson**, D. Affleck, and J. Belsky.
 37. *Use of native plant materials for restoration of decommissioned roads*. USDA Forest Service, Region One Native Plant Materials Program. 2010-2013. \$17,000 USD. PI: **C.R. Nelson**.
 38. *Training leaders in climate change and natural resources through experiential and field-based learning*. USDA National Institute for Food and Agriculture Higher Education Challenge Grant. 2010-2013. \$138,000 USD. PI: S. Running; Co-PIs: N. Phear, L. Yung, P. Brown, S. Dobrowski, J. Goodburn, M. Horejsi, **C.R. Nelson**, D. Scott, D. Six, D. and R. Smith.
 39. *Long-term responses of understory vegetation to variable-retention harvest in the Pacific Northwest: Efficacy of Green-tree Retention Patches*. USDA Forest Service, Pacific Northwest Research Station. 2009-2011. \$70,600 USD. PI: **C.R. Nelson**.
 40. *Maximizing competitive and adaptive potential of native plant materials for revegetation projects: Local ecotypes versus cultivars*. USDA Forest Service, Native Plant Materials Program. 2010-2013. \$68,500 USD. PI: **C.R. Nelson**.
 41. *Promoting native plants after knapweed control in western Montana: Milestone versus*

- Tordon. Montana State Noxious Weed Trust. 2009-2010. \$25,000 USD. PI: **C.R. Nelson**; Co-PI: E. Crone.
42. *Effectiveness of native plant material for re-vegetation of decommissioned roads*. USDA Forest Service, Native Plant Materials Program. 2007-2009. \$70,000 USD. PI: **C.R. Nelson**.
43. *Spatial assessment of fuels treatments across Western US forests*. Wilburforce Foundation. 2007-2008. \$52,000 USD. PI: T. Schoennagel; Co-PI: **C.R. Nelson**.
44. *Effects of competition and environmental factors on climate-growth relationships: Implications for forest restoration and management in the Inland Northwest*. McIntire-Stennis Cooperative Forestry Research Program. 2008-2010. \$85,697 USD. PI: **C.R. Nelson**.
45. *Effects of competition and environmental factors on climate-growth relationships: Implications for forest restoration in the Inland Northwest*. USDA Forest Service, Region 6, Area Ecology Program. 2008-2009. \$46,400 USD. PIs: **C.R. Nelson** and G.C. Carnwath.
46. *Efficient management of white pine blister rust in high-elevation ecosystems: A dynamic modeling approach*. USDA PREISM. 2008-2009. \$178,000 USD. PI: C. Bond; Co-PIs P.A. Champ, A.W. Schoettle, W.R. Jacobi, R. Koski, **C.R. Nelson**, and R. Sniezko.
47. University of Montana Faculty Start-up Award. NSF EPSCoR. 2007-2008. \$50,000 USD. PI: **C.R. Nelson**.
48. David H. Smith Postdoctoral Fellowship, Society for Conservation Biology. 2004-2006. \$144,000 USD. Awarded to **C.R. Nelson**.
49. *Local and regional factors affecting eastern hemlock (*Tsuga canadensis*) regeneration in northern Wisconsin*. USDA Forest Service, North Central Forest Experiment Station. 1994-1995. \$30,000 USD. PI: Don Waller (**C.R. Nelson** graduate research proposal).
50. University of Wisconsin, Graduate Fellowship in Conservation Biology. 1992. Tuition and stipend. Awarded to **C.R. Nelson**.

PUBLICATIONS

Manuscripts in review (*available upon request*)

† Denotes student author or co-author

1. Mohr, J.J., T. Cummins, T.M. Floyd, E.C. Metcalf, R.M. Callaway, and **C.R. Nelson**. In review. Age, experience, and job satisfaction may promote innovation in ecological restoration. *Environmental Management*.
2. Vanlerberghe†, C. Echeverría, **C.R. Nelson**. In review. Restoration as a process: importance of repeat treatments to control invasive and promote native tree species. *Restoration Ecology*.
3. Bannister, J.R., **C.R. Nelson**, A. Holz. In review. Conceptos y bases ecológicas para la restauración de ecosistemas forestales. Chapter 3 in Bannister, J., R. Vargas, V. Claramunt, and J. Ovalle (eds.) *Restauración de Ecosistemas Forestales*. Instituto Forestal. Chile.

4. McIntosh[†], M, J. González-Campos, P., Demaree, O. Toro-Salamanca[†], R. Ipinza, M. Bustamante-Sánchez, R. Hasbún, **C.R. Nelson**. In review. Trait variation between and within Andes and coastal mountain ranges in the iconic South American tree *Araucaria araucana* in Chile. *Conservation Science and Practice*.
5. Young, R., G. D. Gann, B. Walder, J. Liu, W. Cui, V. Newton, **C.R. Nelson**, N. Tashe, D. Jasper, F.A.O. Silveira, P. Carrick, T. Hägglund, S. Carlsén, and K. Dixon. International principles and standards for the ecological restoration and recovery of mine sites. *Restoration Ecology*.

Peer-reviewed Publications

[†] Denotes student author or co-author

1. Tomback, D.F., R.E. Keane, A.W. Schoettle, R.A. Sniezko, M. M. Jenkins, **C.R. Nelson**, A. Bower, C. DeMastus, E. Guiberson, J. Krakowski, M. Murray, E. Pansing, and J. Shamhart. In press. Tamm Reviews: Current and best management practices for the restoration of whitebark pine (*Pinus albicaulis*), a threatened high-elevation western North American forest tree. *Forest Ecology and Management*.
2. Nicholson, E., J.A. Rowland, C.F. Sato, S. Stevenson, K.E. Watermeyer, A. Andrade, T.M. Brooks, N.D. Burgess, H. Grantham, S. Hill, D.A. Keith, M. Maron, D. Metzke, N.J. Murray, **C.R. Nelson**, A. Plumptre, A.L. Skowno, and J.E.M. Watson. 2021. [Scientific foundations for an ecosystem goal, milestones and indicators for the post-2020 Global Biodiversity Framework](#). *Nature Ecology and Evolution* DOI: 10.1038/s41559-021-01538-5.
3. **C.R. Nelson**, A. Romero, J. Hallett, J. Aronson, E. Cohen-Shacham, A. Diederichsen, and M.R. Guariguata (FAO, IUCN-CEM, and SER). 2021. [Principles for Ecosystem Restoration to Guide the United Nations Decade 2021–2030](#). Rome, FAO.
4. Carver, S., I. Convery, S. Hawkins, R. Beyers, A. Eagle, Z. Kun, E. Van Maanen, C. Yue, M. Fisher, S. Edwards, **C.R. Nelson**, G. Gann, S. Shurter, K. Aguilar, A. Andrade, W. Ripple, J. Davis, T. Sinclair, M. Bekoff, R. Noss, D. Foreman, H. Pettersson, M. Root-Bernstein, J.C. Svenning, P. Taylor, S. Wynne-Jones, A. Watson Featherstone, C. Fløjgaard, M. Stanley-Price, L. Navarro, T. Aykroyd, A. Parfitt, and M. Soule. 2021. [Guiding principles for rewilding](#). *Conservation Biology* DOI: 10.1111/cobi.13730.
5. Hernandez[†], C., C. Echeverria, and **C.R. Nelson**. 2021. [Evolution and emerging research trends in the ecological consequences of landscape change: perspectives from a Chilean biodiversity hotspot](#). *Landscape Ecology*. DOI: 10.1007/s10980-021-01247-1.
6. Weidlich[†], E. W. A., **C.R. Nelson**, J.L. Maron, R.M. Callaway, B.M. Delory, and V.M. Temperton. 2021. [Priority effects and ecological restoration](#). *Restoration Ecology* DOI:10.1111/rec.13317.
7. Etter, A., A. Andrade, **C.R. Nelson**, J. Cortés, and K. Saavedra. 2020. [Assessing restoration priorities for high-risk ecosystems: an application of the IUCN Red List of Ecosystems](#). *Land Use Policy* 99: 104874.
8. Andrade, A., E. Cohen-Shacham, J. Dalton, S. Edwards, D. Hessenberger, S. Maginnis, S. Maynard, P. McElwee, R. Murti, **C.R. Nelson**, V. Ruiz, J. Siikamäki, and L. Vasseur (IUCN).

2020. [Global Standard for Nature-based Solutions. A User-friendly Framework for the Verification, Design and Scaling up of NbS. First Edition.](#) Gland, Switzerland: IUCN.
9. Andrade, A., E. Cohen-Shacham, J. Dalton, S. Edwards, D. Hessenberger, S. Maginnis, S. Maynard, P. McElwee, R. Murti, **C.R. Nelson**, V. Ruiz, J. Siikamäki, and L. Vasseur (IUCN) 2020. [Guidance for using the Global Standard for Nature-based Solutions. A User-friendly Framework for the Verification, Design and Scaling up of NbS. First Edition.](#) Gland, Switzerland: IUCN.
 10. León-Lobos P., M. A. Bustamante-Sánchez, **C.R. Nelson**, D. Alarcon, R. Hasbun, M. Way, H. Pritchard, and J.J. Armesto. 2020. [Lack of adequate seed supply chain is a major bottleneck for effective ecosystem restoration in Chile: Friendly amendment to Bannister et al. \(2018\).](#) *Restoration Ecology* 28(2): 277-281.
 11. Mahert†, C.T., C.I. Millar, R.E. Keane, D.L.R. Affleck, A. Sala, A.J. Larson, and **C.R. Nelson**. 2020. [Alpine treeline ecotones are potential refugia for a montane pine species threatened by bark beetle outbreaks.](#) *Ecological Applications*. e2274.
 12. Mahert†, C.T., **C.R. Nelson**, and A.J. Larson. 2019. [Winter damage is more important than summer temperature for maintaining the krummholz growth form above alpine treeline.](#) *Journal of Ecology*. 108(3): 1074-1087.
 13. McWethy, D.A., T. Schoennagel, P. Higuera, M. Krawchuk, B. Harvey, E.C. Metcalf, C. Schultz, C. Miller, A.L. Metcalf, B. Buma, A. Virapongse, J.C. Kulig, R.C. Stedman, Z. Ratajczak, **C.R. Nelson**, and C. Holden. 2019. [Rethinking resilience to wildfire.](#) *Nature Sustainability* 2: 797-804.
 - Covered in the New York Times, Bozeman Daily Chronicle, Mountain West News, MT NPR, and other media.
 14. Gann G.D., T. McDonald, B. Walder, J. Aronson, **C.R. Nelson**, J. Jonson, J.G. Hallett, C. Eisenberg, M.R. Guariguata, J. Liu, F. Hua, C. Echeverría, E. Gonzales, N. Shaw, K. Decler, and K.W. Dixon. 2019. [International principles and standards for the practice of ecological restoration. Second edition.](#) *Restoration Ecology* 27(S1): S1–S46.
 - **C.R. Nelson** lead author of Section 2 Principle 3, *Ecological restoration practice is informed by native reference ecosystems, while considering environmental change.* Pages 26-31.
 - **C.R. Nelson** lead author of Section 4 Part 1, *Developing reference models for ecological restoration.* Pages 65-68.
 - The 12th most downloaded article published in this journal (as of June 2020).
 15. Gaulke†, S., E. Martelli†, L. Johnson†, C. G. Letelier†, N. Dawson, and **C.R. Nelson**. 2019. [Threatened and endangered mammals of Chile: Does research align with conservation information needs?](#) *Conservation Science and Practice* 1(9):e99.
 16. Higuera, P., A. Metcalf, C. Miller, B. Buma, D. McWethy, E. C. Metcalf, Z. Ratajczak, **C.R. Nelson**, B. Chaffin, R. Stedman, S. McCaffrey, T. Schoennagel, B. Harvey, S. Hood, C. Schultz, A. Black, D. Campbell, J. Haggerty, R. Keane, J. Kulig, R. Rafferty, and A. Virapongse. 2019. [Integrating subjective and objective dimensions of resilience in fire-prone landscapes.](#) *BioScience* 69: 379-388.
 - Selected as *Editor's Choice*
 - Covered in the *Missoulian* newspaper, as well as in several on-line news outlets

17. Cohen-Shacham, E., N. Dudley, M. Jones, A. Andrade, C. Kumar, S. Maginnis, **C.R. Nelson**, F. G. Renaud, S. Maynard, H. Gosnell, J. Dalton, R. Welling, G. Walters. 2019. [Core principles for successfully implementing and upscaling Nature-based Solutions](#). *Environmental Science and Policy* 98: 20-29.
 - Ranked by the journal as a top downloaded article.
18. Wiggins[†], H.L., **C.R. Nelson**, A. Larson, and H. Stafford. 2019. [Using LiDAR to develop high-resolution reference models of forest structure and spatial pattern](#). *Forest Ecology and Management* 434: 318-330.
19. Gibson, A.L., **C.R. Nelson**, S. Rinehart, V. Archer, and A. Eramian. 2019. [Importance of considering soils in seed transfer zone development: Evidence from a study of the native *Bromus marginatus*](#). *Ecological Applications* 29(2):e01835.
20. Amberson[†], J., M. Keville, and **C.R. Nelson**. 2018. [Effects of disturbance on tree community dynamics in whitebark pine ecosystems](#). *Forests* 9, 566: 1-23.
21. Maher[†], C.T., **C.R. Nelson**, A.J. Larson, and A. Sala. 2018. [Ecological effects and effectiveness of silvicultural restoration treatments in whitebark pine forests](#). *Forest Ecology and Management* 429: 534-548.
22. Gann, G.D., T. McDonald, J. Aronson, B. Walder, J.G. Hallet, K.W. Dixon, K. Decler, D.A. Falk, E. Gonzalez, C. Murcia, **C.R. Nelson** and A.J. Unwin. 2018. [The SER Standards: a globally relevant and inclusive tool for improving the practice of ecological restoration—a reply to Higgs et al.](#) *Restoration Ecology* 26(3): 426-430.
23. Gibson[†], A.L., **C.R. Nelson**, and D. Atwater. 2018. [Response of bluebunch wheatgrass to invasion: Differences in competitive ability among invader-experienced and naïve populations](#). *Functional Ecology*. 32(7):1857-1866.
24. McManamen[†], C., **C.R. Nelson**, and V. Wagner. 2018. [Timing of seeding after herbicide application influences rates of germination and seedling biomass of native plants used for restoration](#). *Restoration Ecology* 26(6): 1137-1148.
25. Masin[†], E., M. Valliant, and **C.R. Nelson**. 2018. [Can sheep control invasive forbs without compromising efforts to restore native plants?](#) *Range Ecology and Management* 71(2):185-188.
26. Urgenson, L.S., **Nelson, C.R.**, R.D. Haugo, C.B. Halpern, J.D. Bakker, C.M. Ryan, A.E.M. Waltz, R.T. Belote, and E. Alvarado. 2018. [Social perspectives on the use of reference conditions in restoration of fire- adapted forest landscapes](#). *Restoration Ecology* 26(5): 987-996.
27. **Nelson, C.R.**, K. Bowers, J. Lyndall, J. Munro, and J.T. Stanley. 2017. [Professional certification in ecological restoration: improving the practice and the profession](#). *Restoration Ecology* 25(1): 4-7.
28. Carnwath[†], G.C. and **C.R. Nelson**. 2017. [Effects of biotic and abiotic factors on resistance versus resilience of Douglas fir to drought](#). *PLOS One* 12(10): e0185604.
29. Gatica-Saavedra[†], P, C. Echeverría, and **C.R. Nelson**. 2017. [Ecological indicators for assessing ecological success of forest restoration: a world review](#). *Restoration Ecology* 25(6):850-857.
 - Ranked by the journal as a top downloaded article.

30. Keville, M., **C.R. Nelson**, and F.R. Hauer. 2017. [Trends in academic productivity in the field of ecology](#). *Ecosphere* 8(1):e01620.
 - Ranked by the journal as a top downloaded article.
 - Covered in the *Missoulian* and other news outlets.
31. Urgenson, L.S., C.M. Ryan, C.B. Halpern, J.D. Bakker, R.T. Belote, J.F. Franklin, R.D. Haugo, **C.R. Nelson**, and A.E.M. Waltz. 2017. [Visions of restoration in fire-adapted forest landscapes: Lessons from the Collaborative Forest Landscape Restoration Program](#). *Environmental Management* 59:354-355.
32. Gibson[†], A.L., and **C.R. Nelson**. 2017. [Comparing provisional seed transfer zones for a commonly seeded grass, *Pseudoroegneria spicata*](#). *Natural Areas Journal* 37:188-199.
33. Gibson[†], A. L., L. Fishman, and **C.R. Nelson**. 2017. [Polyploidy: a missing link in the conversation about restoration of a commonly seeded native grass in western North America](#). *Restoration Ecology* 25(2): 184-190.
34. Wagner, V., P.M. Antunes, M. Irvine, and **C.R. Nelson**. 2017. [Narrowing the knowledge gap: Herbicide usage for invasive non-native plant management in wildland areas of North America](#). *Journal of Applied Ecology* 54:198-204.
 - Featured in 12 news outlets
 - Ranked #21 of 1,564 articles in the altmetric-score for the journal.
35. Carnwath[†], G.C., and **C.R. Nelson**. 2016. [The effect of competition on responses to drought and inter-annual climate variability of a dominant conifer tree of western North America](#). *Journal of Ecology* 104:1421-1431.
36. Hauer, R.F., H. Locke, V.J. Dreitz, M. Hebblewhite, W.H. Lowe, C.C. Muhlfeld, **C.R. Nelson**, M.F. Proctor, S.B. Rood. 2016. [Gravel-bed river floodplains are the ecological nexus of glaciated mountain landscapes](#). *Sciences Advances* 2(6):e1600026.
 - Featured in multiple news outlets including a story in the Science Section of *The New York Times* and *Christian Science Monitor*, among others.
37. Gibson[†], A.L., E. Espeland, V. Wagner, and **C.R. Nelson**. 2016. [Can local adaptation research in plants inform selection of native plant materials? An analysis of experimental methodologies](#). *Evolutionary Applications* 9:1219-1228.
38. Parks[†], S.A., L. M. Holsinger, C. Miller, and **C.R. Nelson**. 2015. [Wildfire as a self-regulating mechanism: the role of previous burns and weather in limiting fire progression](#). *Ecological Applications* 25:1478–1492.
 - Recipient of 2016 USDA Forest Service Excellence in Wilderness Stewardship Research Award.
39. Hobbs, R.J., E.S. Higgs, C.M. Hall, P. Bridgewater, F.S. Chapin III, E.C. Ellis, J.J. Ewel, L.M. Hallett, J.A. Harris, K.B. Hulvey, S.T. Jackson, P.L. Kennedy, C. Kueffer, L. Lach, T.C. Lantz, A.E. Lugo, J. Mascaró, S.D. Murphy, **C.R. Nelson**, M.P. Perring, D.M. Richardson, T.R. Seastedt, R. J. Standish, B.M. Starzomski, K.N. Suding, P.M. Tognetti, L. Yakob, and L. Yung. 2015. [Managing the whole landscape: historical, hybrid and novel ecosystems](#). *Frontiers in Ecology and the Environment* 12(10): 557-564.
40. Wagner, V., and **C.R. Nelson**. 2014. [Herbicides can negatively affect seed performance in native plants](#). *Restoration Ecology* 22(3): 288-291.

41. Parks†, S.A., C. Miller, **C.R. Nelson**, and Z. A. Holden. 2013. [Previous fires moderate burn severity of subsequent wildland fires in two large western US wilderness areas.](#) *Ecosystems* 17:29-42.
42. Carnwath†, G.C., D.W. Peterson, and **C.R. Nelson**. 2012. [Effect of crown class and habitat type on climate-growth relationships of ponderosa pine and Douglas-fir.](#) *Forest Ecology and Management* 285: 44-52.
43. Parisien, M.A., S. Snetsinger, J.A. Greenberg, **C.R. Nelson**, T. Schoennagel, S.Z. Dobrowski, and M.A. Moritz. 2012. [Spatial variability in wildfire probability across the western United States.](#) *International Journal of Wildland Fire* 21(4) 313-327.
44. Switalski, T. A. and **C.R. Nelson**. 2011. [Efficacy of Road Removal for Restoring Black Bear Habitat in the Northern Rocky Mountains, USA.](#) *Biological Conservation* 144: 2666-2673.
45. Alexander, S., **C.R. Nelson**, J. Aronson, D. Lamb, A. Cliquet, K. Erwin, M. Finlayson, R. de Groot, J. Harris, E. Higgs, R. Hobbs, R.R. Lewis III, D. Martinez, and C. Murcia. 2011. [Opportunities and Challenges for Ecological Restoration within REDD+.](#) *Restoration Ecology*. 19(6): 683-794.
46. Abrahamson†, I., **C.R. Nelson**, and D. Affleck. 2011. [Assessing the performance of sampling designs for measuring abundance of understory plants.](#) *Ecological Applications* 21: 452-464.
47. Grant†, A.S., **C.R. Nelson**, A. Switalski, and S. Rinehart. 2011. [Restoration of native plant communities after road decommissioning: effect of seed mix composition and density on vegetation establishment.](#) *Restoration Ecology* 19(201): 160-169.
48. Schoennagel, T., and **C.R. Nelson**. 2011. [Restoration relevance of recent National Fire Plan treatments in forests of the Western US.](#) *Frontiers in Ecology and the Environment* 9(5): 271-277.
49. Sutherland, S. and **C.R. Nelson**. 2010. [Nonnative plant response to silvicultural treatments: a model based on disturbance, propagule pressure, and competitive abilities.](#) *Western Journal of Applied Forestry* 25: 27-33.
50. Schoennagel, T., **C.R. Nelson**, D.M. Theobald, G.C. Carnwath†, and T.B. Chapman. 2009. [Implementation of National Fire Plan treatments near the wildland-urban interface in the western United States.](#) *Proceedings of the National Academy of Sciences* 106: 10706-10711.
51. Schoennagel, T., **C.R. Nelson**, D.M. Theobald, G.C. Carnwath†, and T. B. Chapman. 2009. [Reply to Fitzsimmons: Transparency needed in defining fire-mitigation effort near wildland-urban interface.](#) *Proceedings of the National Academy of Sciences* 106: E88-E88.
 - Featured in multiple news outlets, including associated press newspapers, NPR, and others.
52. Manolis, J., K. M. Chan, S. Stephens, M. Finkelstein, **C.R. Nelson**, J. B. Grant, and M. P. Dombeck. 2009. [Leadership: A new frontier in conservation science.](#) *Conservation Biology* 23(4): 879-886.
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55. **Nelson, C.R.**, C.B. Halpern, and J.A. Antos. 2007. [Variation in responses of late-seral herbs to disturbance and environmental stress](#). *Ecology* 88(11): 2880-2890.
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57. Lawler, J.J, J.E. Aukema, J.B. Grant, B. Halpern, P. Kareiva, **C.R. Nelson**, J.D. Olden, K. Ohleth, M.A. Schlaepfer, B. Silliman, and P. Zaradic. 2006. [Conservation science: A twenty-year report card](#). *Frontiers in Ecology and the Environment* 4(9): 473-480.
58. **Nelson, C.R.**, and C.B. Halpern. 2005. [Edge-related responses of understory plants to aggregated retention harvest in the Pacific Northwest](#). *Ecological Applications* 15(1): 196-209.
59. **Nelson, C.R.**, and C.B. Halpern. 2005. [Short-term effects of timber harvest and forest edges on ground-layer bryophytes in the Pacific Northwestern United States](#). *Canadian Journal of Botany* 83: 610-620.
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61. Schlaepfer, M.A., J.E. Aukema, J. Grant, B. Halpern, J. Hoekstra, P. Kareiva, J. Lawler, J.C. Manolis, **C.R. Nelson**, J. D. Olden, B. Silliman, S. Stephens, J. Wiens, and P. Zaradic. 2005. [Re-wilding: A bold plan that needs native megafauna](#). *Nature* 437(7061): 951.
62. **Nelson, C.R.** 2004. *Effect of timber harvest and creation of forest edges on abundance, viability, and physiology of understory plants in Douglas-fir forests of the Pacific Northwestern United States*. Dissertation. College of Forest Resources, University of Washington, Seattle, Washington.
63. McKenzie, D., C.B. Halpern, and **C.R. Nelson**. 2000. [Overstory influences on herb and shrub communities in mature forests of western Washington, U.S.A.](#) *Canadian Journal of Forest Research* 30: 1655-1666.
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65. **Nelson, C.R.** 1997. *Hemlock regeneration failure in the Nicolet National Forest, Wisconsin*. Thesis. Department of Forest Ecology and Management, University of Wisconsin–Madison. 96 pp.

Books and Book Chapters

1. Valderrábano, M., C.R. Nelson, E. Nicholson, A. Etter, J. Carwardine, J. Hallett, J. McBreen, and E. Botts. 2021. Using Ecosystem Risk Assessment Science in Ecosystem Restoration: A Guide to Applying the Red List of Ecosystems to Ecosystem Restoration. Gland, Switzerland: IUCN
2. Etter, A., J. Hallett, J. McBreen, and **C.R. Nelson**. 2021. Using ecosystem risk assessment to guide strategic restoration planning. Chapter 3 in Valderrabano, M. et al. Using Ecosystem Risk Assessment Science in Ecosystem Restoration: A Guide to Applying the Red List of Ecosystems to Ecosystem Restoration. Gland, Switzerland: IUCN
3. Hallett, J., **C.R. Nelson**, and J. Carwardine. 2021. Integrating ecosystem risk-assessment into spatial prioritisation and implementation of ecosystem restoration. Chapter 4 in Valderrabano, M. et al. Using Ecosystem Risk Assessment Science in Ecosystem Restoration: A Guide to Applying the Red List of Ecosystems to Ecosystem Restoration. Gland, Switzerland: IUCN
4. **Nelson, C.R.** 2021. Monitoring the effects of restoration activities on ecosystem area, integrity, and risk of collapse. Chapter 5 in Valderrabano, M. et al. Using Ecosystem Risk Assessment Science in Ecosystem Restoration: A Guide to Applying the Red List of Ecosystems to Ecosystem Restoration. Gland, Switzerland: IUCN
5. Valderrabano, M., and **C.R. Nelson**. 2021. Introduction to applying ecosystem risk assessment to ecosystem restoration. Chapter 1 in Valderrabano, M. et al. Using Ecosystem Risk Assessment Science in Ecosystem Restoration: A Guide to Applying the Red List of Ecosystems to Ecosystem Restoration. Gland, Switzerland: IUCN
6. Zuleta, G.A., E. Ceccon, M. Balensiefer, C. Murcia, S. Tajani, C. Escartín, B.G. Johnson, **C.R. Nelson**, L. Wickwire and V. Amaral. 2017. Actualización de principios según realidades latinoamericanas. En: Zuleta, G.A., A.E. Rovere and F.P.O. Mollard (Eds.), *SIACRE-2015: Aportes y Conclusiones. Tomando decisiones para revertir la degradación ambiental*. Cap 3: 33-45. Vázquez Mazzini Editores, Buenos Aires. 240 págs. ISBN 978-987-9132-56-2.
7. Harris, J.A., S.D. Murphy, **C.R. Nelson**, M. Perring, and P. Tognetti. 2013. Characterizing novel ecosystems: challenges for measurement. Chapter 24 in Hobbs, R. and E. Higgs, *Novel Ecosystems: When and How Do We Intervene in the New Ecological World Order?* London: Wiley-Blackwell. ISBN: 978-1-118-35422-3.
8. Hulvey, K.B., R.J. Standish, L.M. Hallett, B.M. Starzomski, S.D. Murphy, **C.R. Nelson**, M.R. Gardener, P.L. Kennedy, T. Seastedt, and K.N. Suding. 2013. [Incorporating novel ecosystems into management frameworks](#). Chapter 18 in Hobbs, R. and E. Higgs, *Novel Ecosystems: When and How Do We Intervene in the New Ecological World Order?* London: Wiley-Blackwell. ISBN: 978-1-118-35422-3.

Reports and Technical Publications

† Denotes student author or coauthor

1. **Nelson, C.R.** 2020. Comments on the Draft Monitoring Framework for the post-2020 Global Biodiversity Framework. Submitted to the United Nations Convention on Biological Diversity on behalf of IUCN CEM Ecosystem Restoration Thematic Group.

2. Gibson, A.L., **C.R. Nelson**, S. Rinehart, A. Eramian, and J. Drapeau. 2019. [Alberta Penstemon USFS Northern Region Seed Transfer Zone](#). Technical Report UMREL-NPM-10. Restoration Ecology Laboratory, University of Montana, Missoula, Montana. USA. DOI: 10.13140/RG.2.2.24638.95045.
3. Gibson, A.L., **C.R. Nelson**, S. Rinehart, A. Eramian, and J. Drapeau. 2019. [Bluebunch Wheatgrass USFS Northern Region Seed Transfer Zone](#). Technical Report UMREL-NPM-09. Restoration Ecology Laboratory, University of Montana, Missoula, Montana. USA. DOI: 10.13140/RG.2.2.24638.95045.
4. Edwards, S., G. D. Gann, J. G. Hallet, **C.R. Nelson**, L. Vasseur and B. Walder. 2018. *Forum on Biodiversity and Global Forest Restoration: Summary Report and Plan of Action*. Society for Ecological Restoration and International Union for the Conservation of Nature Commission on Ecosystem Management.
5. Gibson, A.L., and **C.R. Nelson**. 2018. [Seed Collection Guidelines for Seed-Transfer-Zone Studies](#). Technical Report UMREL-NPM-08. Restoration Ecology Laboratory, University of Montana, Missoula, Montana. USA. DOI: 10.13140/RG.2.2.23763.84003.
6. Gibson, A.L., **C.R. Nelson**, S. Rinehart, A. Eramian, and J. Drapeau. 2018. [Black Chokecherry USFS Northern Region Seed Transfer Zone](#). Technical Report UMREL-NPM-07. Restoration Ecology Laboratory, University of Montana, Missoula, Montana. USA. DOI: 10.13140/RG.2.2.28898.17607.
7. Gibson, A.L., **C.R. Nelson**, S. Rinehart, A. Eramian, and J. Drapeau. 2018. [Tufted Hairgrass USFS Northern Region Seed Transfer Zone](#). Technical Report UMREL-NPM-06. Restoration Ecology Laboratory, University of Montana, Missoula, Montana. USA. DOI: 10.13140/RG.2.2.29412.63360.
8. Gibson, A.L., **C.R. Nelson**, S. Rinehart, A. Eramian, and J. Drapeau. 2018. [White Spirea USFS Northern Region Seed Transfer Zone](#). Technical Report UMREL-NPM-05. Restoration Ecology Laboratory, University of Montana, Missoula, Montana. USA. DOI:10.13140/RG.2.2.14754.12480.
9. Gibson, A.L., **C.R. Nelson**, S. Rinehart, A. Eramian, and J. Drapeau. 2017. [Idaho Fescue USFS Northern Region Seed Transfer Zone](#). Technical Report UMRELNPM-04 Restoration Ecology Laboratory, University of Montana, Missoula, Montana. USA. DOI: 10.13140/RG.2.2.24678.73289.
10. Gibson, A.L., **C.R. Nelson**, S. Rinehart, A. Eramian, and J Drapeau. 2017. [Red Osier Dogwood USFS Northern Region Seed Transfer Zone](#). Technical Report UMREL-NPM-03. Restoration Ecology Laboratory, University of Montana, Missoula, Montana. USA. DOI: 13140/RG.2.2.11256.96006.
11. Gibson, A.L., **C.R. Nelson**, S. Rinehart, A. Eramian, and J Drapeau. 2017. [Mountain Brome USFS Northern Region Seed Transfer Zone](#). Technical Report UMREL-NPM-02. Restoration Ecology Laboratory, University of Montana, Missoula, Montana. USA. DOI: 10.13140/RG.2.2.22162.15043.

12. Gibson, A.L., **C.R. Nelson**, S. Rinehart, A. Eramian, and J Drapeau. 2017. [Pearly Everlasting USFS Northern Region Seed Transfer Zone](#). Technical Report UMREL-NPM-01. Restoration Ecology Laboratory, University of Montana, Missoula, Montana. USA. DOI: 10.13140/RG.2.2.15451.26408.
13. **Nelson, C.R.**, E. Crone, K. Herman, M. Keville, N. Warchola, N., and C. van der Heiden, C. 2017. *Homestead Air Reserve Base: Endangered Plant and Butterfly Surveys*. Technical Report AFCE576316, U.S. Army Corps of Engineers, Environmental Remediation Branch, Northwestern Division, Omaha District.
14. Sacry, A., and **C.R. Nelson**. 2016. *Milltown 2015 Vegetation Monitoring Report*. Geum Environmental and University of Montana. Prepared for State of Montana, Department of Justice, Natural Resource Damage Program.
15. **C.R. Nelson**. 2016. *Upper Clark Fork River Basin: Evaluation of the Efficacy of Restoration Monitoring for Browns Gulch, Harvey Creek, and Spotted Dog Creek*. Prepared for State of Montana, Department of Justice, Natural Resource Damage Program.
16. **C.R. Nelson**, M. Keville, and M. Leff. 2016. *A Review of Academic Programs in Ecological Restoration*. Prepared for Massachusetts Division of Ecological Restoration and Westfield State University.
17. Parks, S.A.; L.M. Holsinger, C. Miller and **C.R. Nelson**. 2015. *Fire atlas for the Selway-Bitterroot Wilderness*. Fort Collins, CO: Forest Service Research Data Archive. <https://doi.org/10.2737/RDS-2015-0024>.
18. Parks, S.A.; L.M. Holsinger, C. Miller and **C.R. Nelson**. 2015. *Fire atlas for the Crown of the Continent Ecosystem (Glacier National Park, Great Bear Wilderness, Bob Marshall Wilderness, and Scapegoat Wilderness)*. Fort Collins, CO: Forest Service Research Data Archive. <https://doi.org/10.2737/RDS-2015-0022>.
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20. Parks, S.A.; L.M. Holsinger, C. Miller and **C.R. Nelson**. 2015. *Fire atlas for the Gila and Aldo Leopold Wilderness Areas*. Fort Collins, CO: Forest Service Research Data Archive. <https://doi.org/10.2737/RDS-2015-0023>
21. Sacry, A., T. Parker and **C.R. Nelson**. 2014. *Milltown 2013 Vegetation Monitoring Report*. Geum Environmental and University of Montana. Prepared for State of Montana, Department of Justice, Natural Resource Damage Program.
22. Wagner, V., Antunes P.M., Irvine M., and **C.R. Nelson**. 2012. *Herbicides in invasive non-native plant management: A quantitative overview of use in North America*. Prepared for the Ontario Ministry of Natural Resources.
23. Connolly-Newman, H.R., M.P. Huijser, L. Broberg, **C.R. Nelson**, and W. Camel-Means. 2013. Effect of cover on small mammal movements through wildlife underpasses along US Highway 93 North, Montana, USA. *Proceedings of the 2013 International Conference on Ecology and Transportation (ICOET 2013)*.

24. Sacry, A., T. Parker and **C.R. Nelson**. 2013. *Milltown 2012 Vegetation Monitoring Report*. Geum Environmental and University of Montana. Prepared for State of Montana, Department of Justice, Natural Resource Damage Program.
25. **Nelson, C.R.** and J. Aukema. 2012. *Milltown Restoration: Effectiveness of the Monitoring Design*. University of Montana. Prepared for State of Montana, Department of Justice, Natural Resource Damage Program.
26. Sacry, A., T. Parker and **C.R. Nelson**. 2011. *Milltown 2010 Vegetation Monitoring Report*. Geum Environmental and University of Montana. Prepared for State of Montana, Department of Justice, Natural Resource Damage Program.
27. Lawrence, N., **C.R. Nelson**, E. Frost, and J. Belsky. 1998. *Comments on the Eastside Draft Environmental Impact Statement for the Interior Columbia Basin Ecosystem Management Project*. Natural Resources Defense Council, San Francisco, California. 65 pp.
28. **Nelson, C.R.**, J. Belsky, R. Brown, E. Frost, B. Keeton, P. Morrison, M. Scurlock, and G. Wooten. 1995. *Key elements for ecological planning: Management principles, recommendations, and guidelines for federal lands east of the Cascade crest in Oregon and Washington*. Natural Resources Defense Council, San Francisco, California. 113 pp.
29. **Nelson, C.R.**, N. Lawrence, R.L. Peters, R.L. Dewey, W.J. Snape, S. Yassa, and T. Uniak. 1995. *Revised comments on the proposed rule for national forest system land and resource management planning; 36 C.F.R. Parts 215, 217, and 219; 60 Fed. Reg. 18886 et seq.* Natural Resources Defense Council, San Francisco, California. 58 pp.
30. **Nelson, C.R.** and J. Baccus. 1992. *Landscape characterization of Curtis Prairie: High-risk areas for reed canary grass (Phalaris spp.) invasion*. University of Wisconsin Arboretum, Madison, Wisconsin. 31 pp.
31. **Nelson, C.R.**, W.G. Mahler, and E. Trowbridge. 1990. *An ecological survey of the late-seral stage forests surrounding the Nolan Creek Watershed*. Prepared for the Washington State Department of Natural Resources' Old Growth Commission, Olympia, Washington. 34 pp.

Science Communication Publications

† Denotes student author or coauthor

1. **Nelson, C.R.**, A. Etter, D. Keith, E. Nicholson, P. Pliscoff, and M. Valderrabano. 2021. Using Ecosystem Risk Assessment to Prioritize Areas for Ecological Restoration: The Red List of Ecosystems. *SER News* 35(1): 4-9.
2. **Nelson, C.R.**, and J. Hallett. 2021. [Nine principles of ecosystem restoration for the Russian tundra](#). *Conservation News*. Mongabay. 15, July Issue.
3. Convery, I., Carver S., A. Adrade, L. Vasseur, C. Zambrana, and **C.R. Nelson**. 2020. Rewilding and restoration for human health: Exploring the connections between zoonotic diseases, human health and well-being, ecosystem degradation and biodiversity loss. *The Ecologist*. 3, July issue.
4. Gann, G.D., T. McDonald, T., B. Walder, J. Aronson, **C.R. Nelson**, J.J. Jonson, C. Eisenberg, J.G. Hallet, M. R. Guariguata, J. Liu, F. Hua, C. Echeverria, and K. Dixon. 2019. *Summary of*

International Principles and Standards for the Practice of Ecological Restoration. Second Edition. Society for Ecological Restoration. Washington, D.C. 7 pages.

5. Amberson†, J., M. Keville, and **C.R. Nelson**. 2019. Effects of disturbance on tree community dynamics in whitebark pine ecosystems. *Nutcracker Notes*. Newsletter of the Whitebark Pine Ecosystem Foundation.
6. **Nelson, C.R.**, S. Edwards, G. D. Gann, J. G. Hallet, L. Vasseur and B. Walder. 2018. Improving biodiversity outcomes from Forest Landscape Restoration. *Newsletter of the Society for Ecological Restoration*.
7. McManamen†, C. and **C.R. Nelson**. 2018. Fine-tuning native plant community restoration at weedy sites. *Kelsey*. Newsletter of the Montana Native Plant Society.
8. Hauer, R.F, H. Locke, V.J. Dreitz, M. Hebblewhite, W.H. Lowe, C.C. Muhlfeld, **C.R. Nelson**, M.F. Proctor, S.B. Rood. 2016. Lifesaving Rivers. *Crown of the Continent and the Greater Yellowstone Magazine*, University of Montana.
9. Cooke, B., S. Parks, C. Miller, L. Holsinger, **C. R. Nelson**, Z. Holden, S. Baggett, and B. Bird. 2016. Wildland fire: Nature’s fuel treatment. *Science You Can Use Bulletin*, Issue 22. Fort Collins, CO: Rocky Mountain Research Station.
10. Amberson†, J.M. Keville, and **C.R. Nelson**. 2014. Successional Dynamics in Whitebark Pine. *Nutcracker Notes*. Newsletter of the Whitebark Pine Ecosystem Foundation.
11. Grant†, A.S. and **C.R. Nelson**. 2011. Restoration of native plant communities after road decommissioning in the Rocky Mountains: Effect of seed-mix composition on vegetative establishment. *The Road-RIPorter*. Wildlands CPR, Missoula, Montana.
12. **Nelson, C.R.**, C.B. Halpern, and J.K. Agee. 2006. Effects of fuel-hazard-reduction treatments on understory plant communities and non-native plant invasions in ponderosa pine forests of eastern Washington. *Cascadia Restoration and Management News*.

PRESENTATIONS

† Denotes student author or coauthor

2021

Invited Global Policy Forum

1. **Nelson, C.R.** 2021. Principles of ecosystem restoration for the UN Decade. Advisory Board Meeting. United Nations Decade on Ecosystem Restoration. Virtual.
2. **Nelson, C.R.**, J. Hallet, M, Guariguata, A. Diederichsen, G. Gann. 2021. Principles of ecosystem restoration for the UN Decade. Launch Event for the United Nations Decade on Ecosystem Restoration. Virtual.

Other Invited

3. **Nelson, C.R.** 2021. Educational requirements for ecological restoration. Symposium presentation. Society for Ecological Restoration World Conference. Virtual.

4. **Nelson, C.R.**, J. Hallet, M, Guariguata, A. Diederichsen, G. Gann. 2021. Principles of ecosystem restoration for the UN Decade. IUCN Commission on Ecosystem Management Ecosystem Restoration Thematic Group Monthly Webinar Series, Ecosystem Restoration: Global Initiatives in Science and Practice. Virtual.
5. **Nelson, C.R. 2021.** Effective monitoring and evaluation of whitebark pine restoration treatments—key to adaptive management and future applications. Symposium presentation. High 5 II: The Second Conference on the Research and Management of High Elevation Five Needle Pines. Virtual.
6. **Nelson, C.R.** 2021. Priorities needs for ecosystem restoration. Symposium (Remote) on Ecosystem Approach as the cornerstone of our future. IUCN World Conservation Congress. Marseille, France. Hybrid.
7. **Nelson, C.R.** and J. Hallett. 2021. Principles of ecosystem restoration for the UN Decade. Symposium on Balancing Cross-sectoral Priorities for Effective Ecosystem Restoration (Remote). IUCN World Conservation Congress. Marseille, France. Hybrid.
8. Hallet, J. and **C.R. Nelson.** 2021. Monitoring the effects of restoration activities on ecosystem area, integrity and risk of collapse. Pavilion event on Using Ecosystem Risk Assessment Science for Ecosystem Restoration. IUCN World Conservation Congress. Marseille, France. Hybrid.
9. **Nelson, C.R.** 2021. Principles and best practices for ecological restoration and allied restorative activities. IUCN Commission on Ecosystem Management 4th Dialogue. Virtual.
10. **Nelson, C.R.** 2021. Opportunities to innovate science into global restoration policy. Invited Seminar: Conservation Biology graduate course. Federal University of Santa Catarina, Florianópolis, Brazil. Virtual.
11. **Nelson, C.R.** 2021. Principios y estándares internacionales de restauración ecológica. Invited Seminar: Curso Postgrado Cambio Ambiental Global Y Sustentabilidad. Universidad de Concepción, Chile. Virtual
12. **Nelson, C.R.** 2021. Principles and standards as a tool for transformative change for ecological restoration. (Remote). Symposium on Nature-based Solutions. Sustainability Research and Innovation Congress. Brisbane, Australia. Hybrid.
13. **Nelson, C.R.** 2021. Developing effective monitoring programs for ecological restoration. Interagency Ecological Restoration Quality Committee (IERQC). Monthly Webinar Series. Virtual.

Contributed

1. DuPre, M.E., **C.R. Nelson**, Y. Lekberg. 2021. Is heterogeneity in plant communities informative of heterogeneity in soil properties? Comparisons of a native and invaded grassland. Ecological Society of America Annual Meeting. Virtual.

2. **Nelson, C.R.** Monitoring the effects of prescribed burning on whitebark pine. High 5 II: The Second Conference on the Research and Management of High Elevation Five Needle Pines. Virtual.

2020

Invited

1. **Nelson, C.R.** 2020. Bottlenecks to forest restoration in Chile: seed sourcing, ecotypic variation, and reference models. Research Seminar. Colorado State University. Virtual.
2. **Nelson, C.R.**, R. Beyers, A. Eagle, A. Luis, L. Vasseur, and C. Zambrana. 2020. Exploring restoration, rewilding and human health. IUCN Commission on Ecosystem Management Ecosystem Restoration Thematic Group Monthly Webinar Series, Ecosystem Restoration: Global Initiatives in Science and Practice. Virtual.
3. **Nelson, C.R.** 2020. Principios y estándares de restauración ecológica. Invited Seminar: Curso Postgrado Cambio Ambiental Global, Universidad de Concepción. Chile. Virtual due to COVID19.
4. **Nelson, C.R.** 2020. Desafíos nacionales e internacionales en la restauración ecológica. Invited Seminar: Curso Postgrado Cambio Ambiental Global, Universidad de Concepción. Chile. Virtual due to COVID19.
5. **Nelson, C.R.** 2020. Catalyzing Transformation in Ecosystem Restoration in Transformative Conservation Webinar. IUCN Commission on Ecosystem Management 2nd Dialogue. Virtual.
6. **Nelson, C.R.** 2021. Opportunities to Innovate Science into Global Restoration Policy. Invited Seminar: Conservation Biology Graduate Course. Federal University of Santa Catarina, Florianópolis, Brazil. Virtual.
7. Andrade, A., E. Cohen-Shacham, P. McElwee, **C.R. Nelson**, and L. Vasseur. 2020. IUCN Global Standard for Nature Based Solutions. Panel presentation. IUCN Commission on Ecosystem Management 1st Dialogue. Virtual.

2019

Invited Plenaries and Interviews

1. **Nelson, C.R.** 2019. The role of ecological restoration in the post-2020 conservation agenda. *Morning plenary panel discussion (live streamed)*. Society for Ecological Restoration World Conference, Cape Town, South Africa.
2. **Nelson, C.R.** 2019. Elevating ecological restoration within global restoration initiatives. *Plenary presentation*. IUCN Commission on Ecosystem Management and Society for Ecological Restoration 2nd Global Forum on Ecological Restoration. Cape Town, South Africa.
3. **Nelson, C.R.** 2019. *Video Interview*. Sheep as a tool to control invasive plants. SciShow.
 - 42,000+ views as of 10/31/2021.

Other Invited

4. **Nelson, C.R.** 2019. Conceptos clave para la restauración ecológica a nivel ecosistémico. *Half-day invited presentation*. VI Curso Internacional Restauración a Escala de Paisaje en el Marco de la Estrategia Nacional de Cambio Climático y Recursos Vegetacionales. Unidad de Cambio Climático y Servicios Ambientales (UCCSA), Gerencia de Desarrollo y Fomento Forestal (GEDEFF) de la Corporación Nacional Forestal (CONAF). Santiago, Chile.
5. **Nelson, C.R.** 2019. Desarrollo de zonas de transferencia de semillas. *Invited presentation*. Workshop on the Genetics of Seed Transfer. Instituto Forestal, Chile. Valdivia, Chile.
6. **Nelson, C.R.** 2019. Restauración ecológica: acuerdos internacionales. *Invited presentation*. Curso de Restauración Ecológica Orientado a Funcionarios de CONAF Region Araucania. Corporación Nacional Forestal (CONAF). Temuco, Chile.
7. **Nelson, C.R.** 2019. Ecosistemas de referencia. *Invited presentation*. Curso de Restauración Ecológica Orientado a Funcionarios de CONAF Region Araucania. Corporación Nacional Forestal (CONAF). Temuco, Chile.
8. **Nelson, C.R.** 2019. Monitoreo y Evaluación. *Invited presentation*. Curso de Restauración Ecológica Orientado a Funcionarios de CONAF Region Araucania. Corporación Nacional Forestal (CONAF). Temuco, Chile.
9. **Nelson, C.R.** 2019. Semillas para la restauración ecológica. *Invited presentation*. Curso de Restauración Ecológica Orientado a Funcionarios de CONAF Region Araucania. Corporación Nacional Forestal (CONAF). Temuco, Chile.
10. **Nelson, C.R.** 2019. Effective ecological monitoring. *Webinar presentation*. IUCN Commission on Ecosystem Management Ecosystem Restoration Thematic Group Monthly Webinar Series, Ecosystem Restoration: Global Initiatives in Science and Practice.
11. **Nelson, C.R., V. Temperton, B. Delory, and E. Weidlich** 2019. What do we know and what do we still need to know to use priority effects in ecological restoration? *Workshop presentation: harnessing the potential of priority effects of order of species arrival to improve ecological restoration outcomes*. Society for Ecological Restoration World Conference, Cape Town, South Africa.
12. **Nelson, C.R.** 2019. Defining the decision space for ecological restoration at the landscape scale. *Symposium presentation: Landscape Restoration - Theoretical and Practical Challenges for Meeting Global Targets*. Society for Ecological Restoration World Conference, Cape Town, South Africa.
13. **Nelson, C.R.** 2019. Application of emerging ideas in plant ecology and evolution to the selection of plant materials for ecological restoration. *Invited seminar*. Biology Department, University of Alberta, Canada.

14. **Nelson, C.R.** 2019. Guidelines for defining the decision space for landscape-scale ecosystem restoration. *Symposium on Landscape Restoration*. International Association for Landscape Ecology Annual Conference. Milan, Italy.

2018

Invited Plenaries and Keynotes

1. **Nelson, C.R.** 2018. Estándares internacionales para la restauración ecológica. Plenary presentation. IV Congreso *Colombiano de Restauración Ecológica*. Florencia, Colombia.
2. **Nelson, C.R.** 2018. Global challenges and opportunities in ecological restoration. *Indigo Partners Corporate Meeting*. Big Fork, Montana.

Other Invited

3. **Nelson, C.R.** and M. Keville. Effects of prescribed fire on whitebark pine. *Whitebark Pine Ecosystem Foundation Annual Conference*. Stanley, Idaho.
4. **Nelson, C.R.** and A. Gibson. 2018. Seed transfer zones: assessing spatial patterns of ecotypic variation. *Workshop on Application of Emerging Topics in Plant Ecology and Evolution to Selection of Native Plant Materials for Restoration and Ecosystem Management*. Ecological Society of America Annual Conference. New Orleans, Louisiana.
5. **Nelson, C.R.** 2018. Experimental designs, collecting reliable data, and determining precision of estimation. *Workshop on Effective Ecological Restoration Monitoring*. *Society for Ecological Restoration North American Conference*. Spokane, Washington.
6. **Nelson, C.R.** The science behind the selection of native plant materials for restoration. *Invited seminar*. Montana Tech. Butte, Montana.
7. **Nelson, C.R.**, G. Gann, and T. McDonald. Reference models for ecological restoration: conceptual basis and best practices. *Symposium on Standards for Ecological Restoration*. *Society for Ecological Restoration North American Conference*. Spokane, Washington.
8. **C.R. Nelson**. Opportunities for improving Biodiversity outcomes from ecosystem restoration. *Brown Bag Presentation*. IUCN Office, Washington DC.

Contributed

9. Wagner, V.W., P.M. Antunes, M. Irvine, C. McManamen, and **C.R. Nelson**. 2018. Herbicides in invasive non-native plant management. *Oral presentation*. NW Science Annual Conference. Olympia, Washington.
10. Gibson, A., **C.R. Nelson**, S. Rinehart, V. Archer, and A. Eramian. 2018. Should we be using soils to guide seed transfer? A case study from the Intermountain West. *Oral presentation*. Society for Ecological Restoration North America Conference. Spokane, Washington.
11. **Nelson, C.R.**, and M. Keville. 2018. Effects of prescribed burning on whitebark pine. *Oral presentation*. Fire Continuum Conference. Joint Annual Conference of the Association for Fire Ecology and the International Association of Wildland Fire. Missoula, Montana.

12. Gaulke†, S., E. Martelli†, L. Johnson, C. Garces, N. Dawson, and **C.R. Nelson**. The status of conservation research for threatened and endangered mammals of Chile. *Ecological Society of America Annual Conference*. New Orleans, Louisiana.

2017

Invited Plenaries and Keynotes

1. **Nelson, C.R.** 2017. Global challenges in the science and practice of ecological restoration. *Provost's Distinguished Lecture Series*, University of Montana. Missoula, Montana.

Other Invited

2. **Nelson, C.R.** 2017. Application of SER's *International Standards for Ecological Restoration* to the Western US. Restoring the West Annual Conference. Logan, Utah.
3. Gibson, A., and **C.R. Nelson**. 2017. Seed transfer in the USFS Northern Region. Forest Service Nursery Clients Meeting. Coeur d'Alene, ID.
4. **Nelson, C.R.** 2017. Opportunities to improve biodiversity outcomes from global forest restoration. *Brown bag seminar*. World Resources Institute. Washington DC.
5. **Nelson, C.R.** and M. Bustamante. 2017. Challenges and opportunities for seed-based restoration strategies in Chile. *Symposium: International Network for Seed-based Restoration*. National Native Seed Conference, Washington DC.
6. **Nelson, C.R.** and A. Gibson. 2017. Scaling up: Common gardens to global restoration initiatives. *Ignite Symposium: Multiple Common Garden Experiments for Meeting Restoration Challenges: Difficulties and Potential Pitfalls*. Ecological Society of America Annual Conference. Portland, Oregon.
7. Gibson, A., V. Wagner, E. Espeland, and **C.R. Nelson**. 2017. Can local adaptation research in plants inform selection of native plant materials? An analysis of experimental methodologies. *Ignite Symposium: Multiple Common Garden Experiments for Meeting Restoration Challenges: Difficulties and Potential Pitfalls*. Ecological Society of America Annual Conference. Portland, Oregon
8. **Nelson, C.R.** 2017. Desafíos en la Ciencia y la Práctica de Restauración Ecológica a Nivel Global. *CIEP Annual Science Symposium*. Coyhaique, Chile.
9. **Nelson, C.R.** 2017. Global restoration as a mechanism for large landscape conservation. *Symposium: Ecological restoration: a strategic path for large-landscape conservation*. Society for Ecological Restoration 7th World Conference. Iguazú Falls, Brazil.
10. Weidlich, E.W.A., **C.R. Nelson**, and V. M Temperton. Research on priority effects and its relevance to restoration. *Symposium: Priority Effects and Ecological Restoration*. Society for Ecological Restoration 7th World Conference. Iguazú Falls, Brazil.
11. **Nelson, C.R.** 2017. Defining the decision space for landscape-scale restoration of forest ecosystems. *Symposium: Assessing and Setting Priorities for Forest Landscape Restoration to Achieve Biodiversity Conservation Targets*. Society for Ecological Restoration 7th World Conference. Iguazú Falls, Brazil.

12. **Nelson, C.R.**, E.W.A. Weidlich, and V.M. Temperton. 2017. Can knowledge of priority effects improve outcomes of ecological restoration? *Symposium: Priority Effects and Ecological Restoration*. Society for Ecological Restoration 7th World Conference. Iguazú Falls, Brazil.
13. **Nelson, C.R.** 2017. Spatial dynamics of reference forest stands. *Research seminar*. Universidade Estadual Paulista, Faculdade de Ciências Agronômicas-FCA, Departamento de Ciência Florestal, Botucatu, Brazil.

Contributed

14. McDonald, T., G. Gann, B. Walder, **C.R. Nelson**, J. Hallet, J. Johnson, and K. Dixon. 2017. New international restoration standards provide guidance for improving ecological and biodiversity outcomes for forest landscape restoration. *Poster presentation*. IUFRO Conference, Puerto Rico.
15. Vanlerberghe, C., F. Aburto, C. Echeverría and **C.R. Nelson**. 2017. Patrón espacial de árboles en bosques pre-andinos: implicancias para la restauración. *Poster presentation*. Chilean Society for Ecological restoration Annual Meeting. Temuco, Chile.

2016

Invited Plenaries and Keynotes

1. **Nelson, C.R.** 2016. Mejora de la calidad de la restauración ecológica a escala global *Plenary presentation*. *Primer Congreso Ecuatoriano de Restauración del Paisaje*. Loja, Ecuador.
2. **Nelson, C.R.** 2016. Ecological foundations of ecosystem restoration: key concepts and emerging trends. *Closing plenary presentation*. *El Primer Congreso Internacional Sobre Gestión y Restauración del Paisaje*, San Jose, Costa Rica.
3. **Nelson, C.R.** 2016. Key concepts for development of reference models for ecological restoration. *Plenary presentation*. *Restauración Ecológica en Chile: Oportunidades y Desafíos Desde la Política y la Práctica*, La Serena Chile. Chile.

Other Invited

4. **Nelson, C.R.** 2016. Ecological restoration and global change. International Seminar. Universidad de Concepción. Concepción, Chile.
5. **Nelson, C.R.** 2016. Presenter in roundtable discussion on careers in ecological restoration and gave closing plenary remarks. III Congreso Colombiano de Restauración Ecológica Rio Negro, Colombia.
6. Maher, C., **C.R. Nelson**, A.J. Larson, and A. Sala. 2016. Ecological effects of thinning treatments to restore whitebark pine. White Bark Pine Ecosystem Foundation Annual Science and Management Workshop. Whitefish, Montana.
7. **Nelson, C.R.** 2016. Ecosystem management for the 21st Century. IUCN World Conservation Congress. Honolulu, Hawaii.

8. **Nelson, C.R.** 2016. Conservation of ESA-listed butterflies and plants on Homestead Airforce Reserve Base. *Pine Rockland Habitat Management Workshop*. Fairchild Botanical Gardens. Florida.

Contributed

9. Temperton, V. M., **C.R. Nelson** and E. Weidlich 2016. Exploring the potential role of priority effects for ecological restoration. *Society for Ecological Restoration European Chapter Annual Conference*, Freising, Germany.

2015

Invited Plenaries and Keynotes

1. **Nelson, C.R.** 2015. Ecosystem restoration in the 21st century: global perspectives from the Society for Ecological Restoration. *Plenary presentation. Biennial Conference of the Latin American and Caribbean Society for Ecological Restoration (SIACRE)*. Buenos Aires, Argentina.

Other Invited

2. McDonald, T., G. Gann, B. Walder, **C.R. Nelson**, J. Hallett, J. Jonson, K. Dixon. 2017. New international restoration standards provide guidance for improving ecological and biodiversity outcomes of forest landscape restoration. *IUFRO International Conference on Forest Landscape Restoration*. San Juan, Puerto Rico.
3. **Nelson, C.R.** 2015. Restoration and wilderness management. *Mansfield Center Wilderness Conference*. University of Montana, Missoula, Montana.
4. **Nelson, C.R.** 2015. UM's Restoration Ecology Lab: Improving the science behind the practice. Presentation to Staff Ambassador Program. University of Montana, Missoula, Montana.
5. **Nelson, C.R.** 2015. Lessons learned from forest landscape restoration in the Western United States. Biennial Conference of the Latin American and Caribbean Society for Ecological Restoration (SIACRE). Buenos Aires, Argentina.
6. **Nelson, C.R.** 2015. Knowledge is power: Developing monitoring programs that increase understanding of restoration outcomes. *Symposium on Riparian Restoration in a Contaminated Environment: Lessons Learned and Challenges in Moving Forward*. Montana Department of Justice, Natural Resource Damage Program. Anaconda, Montana.
7. **Nelson, C.R.** 2015. Effectiveness of herbicide treatments for restoration in the Southwest Crown of the Continent. *Southwest Crown of the Continent Collaborative Forest Landscape Restoration Program Annual Conference*. Lubrecht Experimental Forest, Potomac, Montana.
8. **Nelson, C.R.** 2015. Conservation and restoration of whitebark pine. *Whitebark Pine Workshop*. Confederated Salish and Kootenai Tribe Climate Change Oversight Committee. Salish Kootenai College, Polson, Montana.

9. **Nelson, C.R.** 2015. Knowledge is power: Developing monitoring programs that increase understanding of restoration outcomes. *Seminar*. Natural Resource Program, Travis Airforce Base. California.

2014

Invited Plenaries, Keynotes, and High-level

1. **Nelson, C.R.** 2014. Emerging topics in ecological restoration. *Plenary presentation*. Society for Ecological Restoration Northwest and Great Basin Annual Conference. Redmond, Oregon.
2. **Nelson, C.R.** 2014. Habitat restoration in the 21st Century. *Keynote presentation*. International Symposium on Native Plant Production, Kuwait City, Kuwait.
3. **Nelson, C.R.** 2014. Setting restoration goals and monitoring restoration outcomes. *Invited research seminar to the USDA Forest Service Integrated Resource Restoration staff and other staff in the Office of the Deputy Chief*. Washington DC.

Other Invited

4. **Nelson, C.R.** 2014. University of Montana's Restoration Ecology Lab: Improving the science behind the practice. Presentation to the Montana University System Board of Regents and State Legislators. Missoula, Montana.
5. **Nelson, C.R.** and V. Wagner. 2014. Herbicides can negatively affect seed performance in native plants. *Symposium: Overcoming obstacles to restoration*. Northern Rockies Invasive Plant Council Conference. Spokane, Washington.
6. Gibson, A. and **C.R. Nelson**. 2014. Competitive ability of invader-experienced and invader-naïve populations: selecting native plant materials. *Symposium: Overcoming obstacles to restoration*. Northern Rockies Invasive Plant Council Conference. Spokane, Washington.
7. **Nelson, C.R.** 2014. Restoration of fire-adapted forests: Lessons learned from implementation of the National Fire Plan. *Symposium: Social-Ecological Study of Western Fires: Developing an Integrated Framework for Research*. Joint Conference of the Association of Fire Ecology and International Association of Wildland Fire. Missoula, Montana.
8. **Nelson, C.R.** 2014. Knowledge and training for successful ecological restoration in the 21st century. *Ecosystems, Economy and Society: How Large-scale Restoration can Stimulate Sustainable Development*. National Academy of Sciences, Washington DC.
9. **Nelson, C.R.** 2014. Restoration as a means of achieving conservation: synthesis and future directions. *Symposium: Developing the Linkage between Ecological Restoration and Conservation Biology*. Society for Conservation Biology North American Congress. Missoula, Montana.
10. **Nelson, C.R.** 2014. Operationalizing resilience for ecological restoration. *Symposium: Regime Changes, Resilience, and Restoration – the Evolving Dialogue*. Society for

Ecological Restoration Large-Scale Ecosystem Restoration Conference, New Orleans, Louisiana.

11. **Nelson, C.R.** 2014. Ecological restoration in a changing world: the role of history and function. *Invited research seminar*. University of Austria, Graz.
12. **Nelson, C.R.** 2014. Novel ecosystems: the role of history and function. *Roundtable discussion on ecological novelty*. German Research Foundation. Bonn, Germany.

Contributed

13. Wagner, V., P. M. Antunes, M. Irvine, **C.R. Nelson**. 2014. Herbicides in invasive non-native plant management: An estimate of usage and an assessment of non-target effects on native plants. *German Ecological Society Annual Conference*. Germany.

2013

Invited

1. **Nelson, C.R.** 2013. Monitoring the effects of whitebark pine restoration treatments in the Southwest Crown of the Continent Collaborative Forest Landscape Restoration Program. *Whitebark Pine Ecosystem Foundation Annual Science Conference*. Bozeman, Montana.
2. **Nelson, C.R.** 2013. Connecting the dots: Engaging students in the science and practice of ecological restoration. *UM Charters Days, Celebrate Academics Event*. Missoula, Montana.
3. **Nelson, C.R.** 2013. Monitoring the effectiveness of herbicide treatments. *Building Bridges Workshop: Monitoring the Efficacy of Weed Management Tools*. Missoula, Montana.
4. **Nelson, C.R.** 2013. Effectiveness of herbicide treatments for restoration in the Southwest Crown of the Continent. *Southwest Crown of the Continent Collaborative Forest Landscape Restoration Program Annual Conference*. Lubrecht Experimental Forest, Potomac, Montana.
5. **Nelson, C.R.** 2013. Whitebark pine restoration in the Southwest Crown of the Continent. *Southwest Crown of the Continent Collaborative Forest Landscape Restoration Program Annual Conference*. Lubrecht Experimental Forest, Potomac, Montana.
6. **Nelson, C.R.**, and S. Murphy. 2013. Best practices for using resilience theory in restoration. *Symposium: Integrating Resilience Ecology into Restoration Practice*. Society for Ecological Restoration World Conference. Madison, Wisconsin.
7. Dovčiak, M., C.B. Halpern, **C.R. Nelson**, S.A. Evans. 2013. Conserving bryophytes in working forests: insights from the Demonstration of Ecosystem Management Options (DEMO) Experiment. *Bryophyte Symposium*. Canadian Botanical Society Annual Conference. Kamloops, British Columbia, Canada.

Contributed

8. Forestieri, D., R. Lloyd†, and **C.R. Nelson**. 2013. Transforming forest road restoration by integrating lessons from a decade of adaptive monitoring. *Society for Ecological Restoration World Conference*. Madison, Wisconsin.

2012

Invited Plenary and Keynote

1. **Nelson, C.R.** 2012. Knowledge is power: New paradigms for increasing understanding of restoration outcomes. *Opening Plenary. Joint Conference of the Society for Ecological Restoration Northwest and Northwest Chapter American Fisheries Society*. Victoria, British Columbia, Canada.

Other Invited

2. **Nelson, C.R.** 2012. Importance of assessing restoration outcomes: examples from western North American forests. *Invited research seminar. Joint Research Council of the European Union*. Ispra, Italy.
3. **Nelson, C.R., S. Murphy, J. Harris, K. Hulvey, and B. Starzomsky.** 2012. Novel ecosystems: Clarifying the role of function and history. *Symposium: Novel ecosystems and invasive species-new normal or red herring. Society for Ecological Restoration Europe Conference*. Cheske Budejovice. Czech Republic.
4. **Nelson, C.R.** 2012. Effectiveness of herbicide treatments for restoration in the Southwest Crown of the Continent. *Southwest Crown of the Continent Collaborative Forest Landscape Restoration Program Annual Conference*. Lubrect Experimental Forest, Potomac, Montana.
5. **Nelson, C.R.** 2012. Citizen scientist programs for restoration in the Southwest Crown of the Continent. *Southwest Crown of the Continent Collaborative Forest Landscape Restoration Program Annual Conference*. Lubrect Experimental Forest, Potomac, Montana.
6. **Nelson, C.R.** 2012. Improving restoration of mixed-severity fire regimes: Looking back to move ahead. *Symposium: Mixed Severity Fire Regimes as a Guiding Concept for Forest Management: Variability in Space and Time, Restoration, and Future Challenges. Ecological Society of America Annual Conference*. Portland, Oregon.
7. Wagner, V., P. Antunes, M. Irvine, and **C.R. Nelson**. 2012. Herbicide use in invasive exotic plant management: a review of policy regulations and current use, with a focus on North America. *Terrestrial Invasive Plant Species Conference*. Sault Ste Marie, Ontario, Canada.
8. **Nelson, C.R., V. Wagner, and P. Antunes.** 2012. Non-target effects of herbicides on native plants and soil biota: the current state of knowledge. *Terrestrial Invasive Plant Species Conference*. Sault Ste Marie, Ontario, Canada.

9. **Nelson, C.R.** 2012. Academic curricula in ecological restoration. *Into the Future: Montana's Job Growth and Workforce Development Conference*. MT State AFL-CIO. Missoula, Montana.
10. **Nelson, C.R.** 2012. Lessons learned from multi-party monitoring: Southwestern Crown of the Continent Collaborative Forest Landscape Restoration Project. *USDA Forest Service Terrestrial Weed Management Workshop*. Missoula, Montana.

Contributed

11. Fauver†, B.M., K. Pennick, and **C.R. Nelson**. 2012. Efficacy of using citizen scientists for monitoring changes in vegetation after forest restoration. *Public Participation in Public Research Conference held in associations with the Ecological Society of America Annual Conference*. Portland, Oregon. (Poster presentation)
12. LaPlant†, D.R.T. Belote, and **C.R. Nelson**. 2012. Lifespans of fuel-reduction projects in forests of the Crown of the Continent, Montana: How long can we expect today's investments to be effective at reducing fire risk? *Montana Chapter Society for Conservation Biology*. Bozeman, Montana. (Poster presentation)
13. Carnwath†, G.C., and **C.R. Nelson**. 2012. Competition modulates climate sensitivity of *Pseudotsuga menziesii*. *Ecological Society of America Annual Conference*. Portland, Oregon.
14. Juran†, A. and **C.R. Nelson**. 2012. Rethinking revegetation treatments after road removal in the Rocky Mountains. *Joint Conference of the Society for Ecological Restoration Northwest and Northwest Chapter American Fisheries Society*. Victoria, British Columbia, Canada.

2011

Invited Plenaries and Keynotes

1. **Nelson, C.R.** 2011. The future of ecological restoration. *Plenary Forum. Novel Ecosystems: When and how should we intervene in the new ecological world order?* Restoration Institute. Victoria, British Columbia, Canada.

Other Invited

2. **Nelson, C.R.**, L. Hallett, J. Harris, K. Hulvey, S. Murphy, B. Starzomsky, and P. Tognetti. 2011. Defining novel ecosystems: Biotic, abiotic, and functional dissimilarity. *Symposium: Novel Ecosystems. Society for Ecological Restoration World Conference*. Merida, Mexico.
3. **Nelson, C.R.** 2011. What are students of ecological restoration required to learn?: A review of academic curricula in the United States and Canada. *Symposium: The Body of Knowledge – Accreditation of Academic Programs. Society for Ecological Restoration World Conference*. Merida, Mexico.
4. Schoennagel, T., **C.R. Nelson**, and M. Moritz. 2011. Managing human-wildfire interactions in a changing climate. *Symposium: Emerging Issues in Earth Stewardship –*

An Intersection between Science and Society. Ecological Society of America Annual Conference. Austin, Texas

Contributed

5. **Nelson, C.R.** and T. Schoennagel. 2011. Implementation of forest restoration treatments in the Western US: Do we need to rethink management objectives? *The Nature Conservancy All Science Conference: Conservation Science for People and Nature*. Olive Branch, Mississippi.
6. **Nelson, C.R.**, T. Schoennagel, S. Snetsinger, S. Dobrowski, M. Parisien, and M. Moritz. 2011. What is the probability that forests treated for fire mitigation will experience subsequent wildfire?: Rethinking forest restoration in the western US. *Society for Ecological Restoration World Conference*. Merida, Mexico.

2010

Invited Plenaries and Keynotes

1. **Nelson, C.R.** 2010. Tackling the future's most pressing conservation challenges in a changing world. *Plenary Session. Society for Conservation Biology Annual Conference*. Edmonton, Alberta, Canada.

Other Invited

2. **Nelson, C.R.**, I. Abrahamson, A. Jones[†], and K. Pennick. 2010. Restoration and management of high-elevation pines: Cost and efficacy of white pine blister rust treatments. *The Future of High-elevation Five-needle White Pines in Western North America Conference*. Whitebark Pine Ecosystem Foundation. Missoula, Montana.
3. **Nelson, C.R.** 2010. Implications of climate change for selection and use of native plant materials. *National Native Seed Conference*. Snowbird, Utah.
4. **Nelson, C.R.** 2010. Ecological restoration in a changing world: Considerations for forest and wilderness managers. *RM-CESU Wilderness Stewardship in the Rockies Conference*. Lubrecht Experimental Forest, Potomac, Montana.
5. **Nelson, C.R.** 2010. Restoration of fire-dependent forests in the Western US: Matching practice to theory. *Montana Society of American Foresters Annual Conference*. Missoula, Montana.

Contributed

6. **Nelson, C.R.** and T. Schoennagel. 2010. Restoration relevance of recent National Fire Plan treatments in the Western U.S. *Society for Conservation Biology Annual Conference*. Edmonton, Alberta, Canada.
7. **Nelson, C.R.** and C.B. Halpern. 2010. Do forest fragments retained during timber harvest provide refugia for late-seral herbs and bryophytes? *Society for Conservation Biology Annual Conference*. Edmonton, Alberta, Canada.
8. Switalski, T. A., and **C.R. Nelson**. 2010. Activity patterns of a hunted black bear population in response to different road access management and restoration practices

in Idaho. *Society for Conservation Biology Annual Conference*. Edmonton, Alberta, Canada.

9. Abrahamson[†], I., and **C.R. Nelson**. 2010. Assessing the performance of sampling designs for measuring abundance of understory plants after forest restoration. *Society for Ecological Restoration Northwest Annual Conference*. Lynnwood, Washington.
10. Grant[†], A.S., and **C.R. Nelson**. 2010. An evaluation of road removal practices on national forests of the Pacific and Northwestern United States. *Society for Ecological Restoration Northwest Annual Conference*. Lynnwood, Washington.

2009

Invited

1. **Nelson, C.R.** 2009. Rethinking forest restoration in the western US: Matching practice to theory. *The University of Montana College of Forestry and Conservation Seminar*. Missoula, Montana.
2. **Nelson, C.R.** and T. Schoennagel. 2009. Opportunities for academic training in the science and practice of restoration in the United States and Canada. *Symposium at the Society for Ecological Restoration World Conference*. Perth, Australia.
3. **Nelson, C.R.** and T. Schoennagel. 2009. Does forest restoration practice follow restoration ecology theory?: Case studies from the western United States. *Symposium: New Approaches to Restoration Ecology in a Changing World. International Association for Ecology and Ecological Society of Australia, Joint Annual Conference*. Brisbane, Australia.
4. **Nelson, C.R.** and T. Schoennagel. 2009. Spatial patterns in National Fire Plan treatments: Wildland-urban interface and fire regimes. *USDA Forest Service, Rocky Mountain Research Station Missoula Fire Sciences Laboratory Seminar*. Missoula, Montana.

Contributed

5. Jones[†], A. J., **C.R. Nelson**, E. Crone, and K. Pennick. 2009. Effects of herbicides on native plant population viability and growth. *Fort Missoula Greenhouse Open House*. Missoula, Montana. (Poster Presentation).
6. Grant[†], A.S., and **C.R. Nelson**. 2009. Restoration of native plant communities after road decommissioning in the Northern Rocky Mountains. *Northwest Scientific Association Annual Conference*. Seattle, Washington.

2008

Invited

1. **Nelson, C.R.** 2008. Ecological restoration: defining ecological, social, and learning successes. *Collaboration and Capacity Building Workshop*. National Forest Foundation. Seeley Lake, Montana.

2. **Nelson, C.R.** 2008. Restoration education in North America: How do programs in Montana rate? *Growing a Restoration Workforce: A Workshop on Education and Training for the Restoration Economy*. Butte, Montana.
 - Media following presentation: Quoted in *The Montana Standard* (Butte) and *Business Week Magazine* (Sector and Industry section).
3. **Nelson, C. R.**, A. Nicklison[†], I. Abrahamson[†], A. Grant[†], and C. Swanson. 2008. Assessing ecologic and economic impacts of nonnative forest insects and diseases: White pine blister rust as a case study. *Symposium: Ecologic and Economic Impacts of Nonnative Forest Insect and Diseases. Ecological Society of America Annual Conference*. Milwaukie, Wisconsin.
4. Sutherland, S. and **C.R. Nelson**. 2008. Effects and implications of biomass removal on nonnative invasive plants. *Forest Biomass Utilization: Impact on Forest Resources Conference*. Western Forestry and Conservation Association. Spokane, Washington.
5. **Nelson, C.R.** 2008. Ecological costs of forest restoration. Alien Invasive Species Management Conference, Restoration Institute, University of Victoria, Victoria, British Columbia, Canada.
6. **Nelson, C.R.** 2008. Principles of restoration, reclamation, and revegetation. *USDA Forest Service Revegetating with Native Plants Workshop*. Missoula, Montana.
7. **Nelson, C.R.** 2008. A primer on ecological restoration. *Seminar. National Forest Foundation*. Missoula, Montana.
8. **Nelson, C.R.**, C.B. Halpern, and J.K. Agee. 2008. Do conventional forest restoration treatments restore understory plant communities? *Invasive Species in Natural Areas Conference*. Missoula, Montana.
9. Nicklison[†], A., I. Abrahamson[†], A. Grant[†], **C.R. Nelson**, and C. Swanson. 2008. Half a century of research on white pine blister rust: What have we learned about the ecologic and economic impacts? *National Center for Ecological Analysis and Synthesis Conference on Forest Pests and Pathogens*. Santa Barbara, California.

Contributed

10. Schoennagel, T., **C.R. Nelson**, T.B. Chapman, G.C. Carnwath[†], and D.M. Theobald. 2008. A spatial evaluation of recent National Fire Plan treatments across the western US. *Ecological Society of America Annual Conference*. Milwaukie, Wisconsin.
11. C.B. Halpern, M. Dovciak, **C.R. Nelson**, and S.A. Evans. 2008. Responses of vascular and non-vascular plants to structural-retention harvests in the Pacific Northwest. *Ecological Society of America Annual Conference*. Milwaukie, Wisconsin.

2007 and earlier

Invited Plenary, Keynote, and Testimony

1. **Nelson, C.R.** 1998. Testimony on emergency exemptions from the National Environmental Policy Act (NEPA) for salvage sales and discussion draft bill on "NEPA

Equity.” *United States House of Representatives, Subcommittee on Forests and Forest Health*. Washington, D.C.

2. **Nelson, C.R.** and J. Talberth. 1991. Remnant interior forest stands in national forests of Washington and Oregon. *Invited presentation to Committee of Scientists (“Gang of Four”) appointed by the United States House of Representatives, Agriculture Committee to provide Congress with a range of management strategies for Pacific Northwest forests*. Portland Coliseum, Portland, Oregon.

Other Invited

3. **Nelson, C.R.**, C.B. Halpern, and J.K. Agee. 2006. Effects of fuel-hazard reduction treatments on understory composition and non-native plants in ponderosa pine forests of eastern Washington. *Third International Fire Ecology and Management Congress*. San Diego, California.
4. **Nelson, C.R.** 2006. Non-target effects of forest restoration treatments. *Research seminar*. The Nature Conservancy. Seattle, Washington.
5. **Nelson, C.R.** 2005. Effects of forest restoration treatments on understory plant community dynamics. *Pacific Northwest Fire Learning Network Meeting*. Bend, Oregon.
6. **Nelson, C.R.** 2005. Twenty-first century forestry in the Pacific Northwest: Do current conservation practices make the cut? *Research seminar*. The Evergreen State College. Olympia, Washington.
7. **Nelson, C.R.** and C.B. Halpern. 2004. Short-term responses of vascular plants and bryophytes in forest patches retained during structural retention harvest. Field trip presentation. *Balancing Ecosystem Values Workshop at International Union of Forest Research Organizations (IUFRO) Conference*. Portland, Oregon.
8. **Nelson, C.R.** 2002. Influence of forest edges on understory vegetation: A synthesis of three decades of research in temperate forests. *Symposium: Forest Edges - Unifying Concepts and Key Research Needs. Ecological Society of America Annual Conference*. Tucson, Arizona.
9. **Nelson, C.R.** 2001. Pacific Northwest forest understories: life history characteristics and successional development. *Seminar. Central Washington University*. Ellensburg, Washington.
10. **Nelson, C.R.** 2000. Alternative silvicultural research in the Pacific Northwest. *Seminar*. Shoreline Community College. Seattle, Washington.

Contributed

11. **Nelson, C.R.**, C.B. Halpern, and J.K. Agee. 2006. Understory plant responses to thinning and burning in ponderosa pine forests of eastern Washington. *Society for Conservation Biology Annual Conference*. San Jose, California.
12. Evans, S. A., **C.R. Nelson**, J. F. Saracco, M. Dovciak, and C.B. Halpern. 2006. Persistence of forest-floor bryophytes in a structural-retention experiment: Effects of level and

pattern of overstory retention. *Botanical Society of America Annual Conference*. Chico, California.

13. **Nelson, C.R.** 2004. Demographic responses to timber harvest and acclimation to environmental change for three late-seral forest herbs. *Ecological Society of America Annual Conference*. Portland, Oregon.
14. **Nelson, C.R.** and C.B. Halpern. 2004. Short-term effects of timber harvest and forest edges on ground-layer bryophytes in the Pacific Northwestern United States. *Society for Conservation Biology Annual Conference*. New York City, New York.
15. **Nelson, C.R.** and C.B. Halpern. 2001. Vegetation responses along edge-to-interior gradients within green-tree retention patches in Douglas-fir forests. *Ecological Society of America Annual Conference*. Madison, Wisconsin.
16. **Nelson, C.R.** and C.B. Halpern. 1999. The consequences of aggregated canopy retention for understory herbs in Pacific Northwest forests. *Ecological Society of America Annual Conference*. Spokane, Washington.
17. McKenzie, D., C.B. Halpern, and **C.R. Nelson**. 1999. Overstory/understory relationships in Pacific Northwest forests: Predicting mean and maximum response. *Ecological Society of America Annual Conference*. Spokane, Washington.
18. **Nelson, C.R.** and C.B. Halpern. 1998. The consequences of aggregated retention for understory plants: An exploration of hypotheses. *Northwest Scientific Association Annual Conference*. Olympia, Washington.
19. **Nelson, C.R.** and D.M. Waller. 1996. Local and regional factors affecting eastern hemlock (*Tsuga canadensis*) regeneration in northern Wisconsin. *Ecological Society of America Annual Conference*. Providence, Rhode Island.

STUDENTS MENTORED

M.S. Advisees - completed

1. Ilana Abrahamson (M.S. Forestry, 2009); Thesis – *Assessing the Performance of Sampling Designs for Measuring Abundance of Understory Plants after Forest Restoration*; Current position – Supervisory Ecologist, USFS Missoula Fire Science Laboratory, Missoula, MT
2. Jeremy T. Amberson (M.S. Forestry, 2014); Thesis – *Effects of Disturbance on Tree Community Dynamics in Whitebark Pine Ecosystems*; Current position – Owner, GCFR Environmental Services LLC, Missoula, MT
3. Ashley Juran (M.S. Forestry, 2009); Thesis – *Restoration of Native Plant Communities after Road Decommissioning: Effect of Seed Mix and Soil Properties on Vegetation Establishment*; Current position – Stewardship Initiative Coordinator, Montana State Department of Natural Resources and Conservation, Missoula, MT
4. Eva S. Masin (M.S. Resource Conservation, 2011); Thesis – *Can Sheep Control Leafy Spurge without Compromising Efforts to Restore Native Plants?* Current position – Biological Scientist, USFS Missoula Fire Science Laboratory, Missoula, MT

5. Christine McManamen (M.S. Resource Conservation, 2017) Thesis – *Does Timing of Herbicide Use Influence Rates of Germination or Seedling Biomass of Native Plants Used for Restoration?*; Current position – Restoration Specialist at Nez Perce Tribe Department of Fisheries Resources Management.
6. Haley L. Wiggins (M.S. Resource Conservation, 2017); Thesis – *The Influence of Tree Height on Lidar's Ability to Accurately Characterize Forest Structure and Spatial Pattern Across Reference Landscapes*; Current position – Plant Ecologist, The Bloedel Reserve, Poulsbo, WA.
7. Philip Williams (M.S. Forestry, 2019); *Remote Sensing and Unmanned Aerial Systems*.

M.S. Advisees - in progress

1. Abigail Marshall (Univ. of MT)
2. Enzo Martelli Moya (Univ. of MT)

Ph.D. - completed

1. Gunnar Carnwath (PhD Forestry 2012; USFS Ecologist, Gallatin National Forest, MT); Dissertation – *Effects of Biotic Interactions On Climate-Growth Relationships Of Douglas-Fir And Ponderosa Pine*; Current position – Forest Ecologist, USFS Custer Gallatin National Forest, Bozeman, MT.
2. Alexis Gibson (PhD Forestry, 2015) Dissertation – *The science behind the selection of native plant materials: local adaptation, response to invasion, cytotypic variation, and seed transfer zones*; Current position – Program Manager, Society for Ecological Restoration, Washington D.C. (based in Missoula, MT).
3. Colin Maher (PhD Forestry and Conservation Sciences, 2018); Dissertation – *Global Change and Whitebark Pine: Restoration, Refugia, and Alpine Treelines*; Current position – Post Doc, University of Alaska, Anchorage, AK.
4. Sean Parks (PhD Forestry and Conservation Sciences, 2014); Dissertation – *Quantifying the Influence of Past Wildfires on The Severity and Size of Subsequent Wildfires*; Current position – Research Ecologist, Aldo Leopold Wilderness Research Institute, USFS Rocky Mountain Research Station, Missoula, MT.

Ph.D. – in progress

1. Mariah McIntosh (PhD Forestry and Conservation Sciences)
2. Cynthia Vanlerberghe Molinet (PhD Ciencias Forestales; co-tutor with C. Echeverria, Universidad de Concepción, Chile)
3. Luis Fajardo (PhD Ciencias Forestales; co-tutor with C. Echeverria, Universidad de Concepción, Chile)

Postdoctoral Advisees (3 total)

1. Alexis Gibson (2015-2019); Current position – Program Manager, Society for Ecological Restoration, Washington DC (Based in Missoula, MT)

2. Deborah Rother (2015); Current position – Post Doc, Plant Biology Department, University of Campinas, Brazil.
 3. Viktoria Wagner (2011-2012); Current position – Assistant Professor, University of Alberta, Canada.
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EDITORIAL BOARDS AND MANUSCRIPT REVIEW

- Associate Editor, *Fire Ecology* (2013-present)
 - Coordinating Editor, *Restoration Ecology* (2008-present).
 - Manuscript Referee, *Biological Conservation*, *Biological Invasions*, *Botany* (formerly *Canadian Journal of Botany*), *Canadian Journal of Forest Research*, *Conservation Biology*, *Ecological Applications*, *Ecological Restoration*, *Fire Ecology*, *Forest Ecology and Management*, *Forestry*, *Frontiers in Ecology and the Environment*, *Journal of Applied Ecology*, *Northwest Science*, *Range Ecology and Management*, *Restoration Ecology*, *Science*, and *Trends in Ecology and Evolution* (ongoing).
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OTHER PROFESSIONAL SERVICE

Administrative and Leadership Positions for Professional Organizations

- Whitebark Pine Ecosystem Foundation
 - Member, Board of Directors (2020-present)
- Biodiversa and WJPI Joint Initiative (a EU Horizon 2020 Program)
 - Chair, Evaluation Committee, €24M funding program, “*Conservation and restoration of degraded ecosystems and their biodiversity, including a focus on aquatic systems (BiodivRestore)*” (2020-2021)
- International Union for Conservation of Nature (IUCN)
 - Member, Advisory Board of Nature-based Recovery Initiative (2021-present)
 - Focal Point, Resolution 009: Protecting and restoring endangered grassland and savannah ecosystems (2021-present)
 - Chair, Ecosystem Restoration Thematic Group, Commission on Ecosystem Management (CEM) (2017-present)
- United Nations Decade on Ecosystem Management
 - Co-chair, Good Practices Sub-Taskforce (2021)
- Society for Ecological Restoration International
 - Chair, Board of Directors (2013-2015)
 - Vice-Chair, Board of Directors (2015-2017; and 2011-2013)
 - Member and past Chair, Science and Policy Committee (2015-present)
 - Interim Executive Director (2013-2015)
 - Member, Standards Committee, former member Executive Committee and former Co-Chair of the Education Working Group, Society for Ecological Restoration Practitioner Institute (2009-present)
 - Executive Committee Member (2008-2017)

- Search Committee Member, Society for Ecological Restoration, Executive Director Searches (2008; 2012; and 2015)
- Society for Ecological Restoration Northwest
 - Member, Board of Directors (2004-2009)

Leadership Roles in Professional Conferences and Workshops

- Member, Conference Planning Committee, High 5 II: The Second Conference on the Research and Management of High Elevation Five Needle Pines (2021; 3 days)
- Member, Plenary Committee for Knowledge Theme, IUCN World Conservation Congress, France (2021; 4,500 participants; 5 days).
- Organizer, 3rd Global Forum on Ecological Restoration (2021; virtual event; 58 participants from 37 countries; 6 1/2 –day sessions).
- Organizer, 2nd Global Forum on Ecological Restoration, South Africa (2019; 47 participants; 1 day).
- Organizer, Workshop on Forest Ecosystem Restoration, Universidad de Concepcion (2017; 25 participants; 3 days).
- Organizer, 1st Global Forum Ecological Restoration, Brazil (2017; 52 attendees from 15 countries; 1 day).
- Vice Chair, Conference Organizing Committee, Society for Ecological Restoration 7th World Conference, Brazil (2017; 1000 attendees; 6 days).
- Member, Conference Executive Committee, Society for Ecological Restoration World Conference, Manchester UK (2013-2015; 800 attendees; 6 days).
- Co-Chair, Conference Committee and Chair, Sponsorship Committee, Society for Ecological Restoration, Large-scale Ecosystem Restoration Conference, New Orleans Louisiana (2013-2014; 1200 attendees; 5 days).
- Member, Conference Planning Committee, Society for Conservation Biology, David H. Smith Conservation Fellowship Program Conference, Seeley Lake Montana (2013-2014; ca. 60 attendees; 3 days).
- Organizer, Conference Symposia and Workshops (2008-present)
 - IUCN World Conservation Congress, Marseille, France (September 2021; 2 plenary sessions, 1 conservation action café, and 1 thematic stream session).
 - High 5 II: The Second Conference on the Research and Management of High Elevation Five Needle Pines (2021; Student Networking and Professional Development Session).
 - Society for Ecological Restoration World Conference, Cape Town, South Africa (September, 2019; 1 workshop and 2 symposia).
 - Society for Ecological Restoration Northwest Chapter and North American Conference, Spokane, Washington (October, 2018; workshop).
 - Ecological Society of America Annual Conference, New Orleans, Louisiana (August 2018; ignite session).
 - Society for Ecological Restoration World Conference, Iguazu Falls, Parana, Brazil. (August 2017; 2 symposia).
 - IUCN World Conservation Congress, Honolulu, Hawaii (September 2016; workshop).

- Pine Rockland Habitat Conservation Workshop, Fairchild Tropical Botanic Gardens, Coral Gables, Florida (2016; symposia).
- Society for Ecological Restoration World Conference, Merida, Mexico (August 2011; symposium).
- Ecological Society of America Annual Conference, Milwaukee, Wisconsin (August 2008; symposium).

Academic Service Activities

University Level

- Mansfield Library Working Group (2020-2021)
- International Council (Member and Chair Faculty Liaison Subcommittee, 2019-present)
- Global Task Force (Member, 2018)
- Graduate Council (Member, 2017-2018; Chair, 2019-2020; Co-Chair, 2020-2021)
- Oversight and Admissions Committee, Doctoral Interdisciplinary Studies Program (Chair, 2018-2019; Member 2017, 2019-present)
- Environmental Control for Organismal Research (ECOR) Facility (Associate Director, 2016-present)
- Ecology Program Review Committee (Member, 2015-2016)
- ASCRC (Member and Member Forestry and Health Sciences Subcommittee, 2015-2016)
- Systems Ecology Graduate Program Committee (Member, 2014-present)
- Search Committees: Associate Provost (Member, 2013) and Director, Environmental Control for Organismal Research (ECOR) Facility (Member, 2019)

College Level

- Department of Ecosystem and Conservation Sciences (Chair, 2021-present)
- Environmental Science and Sustainability Program Committee (Member 2021-present)
- Graduate Affairs Committee (Chair, 2018-present)
- Franke Sustainability Fellowship Committee (Member, 2018-2020)
- Recruitment Committee (Chair, 2018-2019)
- Ecosystem Science and Restoration Program Committee (Chair, 2007-2015; Member 2016-2021)
- Undergraduate Affairs Committee (Member, 2007-2015)
- College Council (Member, 2007-2015; 2021-present)
- Search Committees: Director of Field Education, Wilderness Institute (Member); Aquatic Invertebrate Ecologist (Member); Forest Ecologist (Member); Freshwater Ecologist (Member); Aquatic Ecologist (Member); Fire Ecologist (Chair) (2007-present)
- Mission and Vision Committee (Member, 2008)
- Native American Natural Resource Program Committee (Member, 2007-2009)

Other Service Activities

- Member, Strategic Planning Task Force for *Natural Areas Journal* (2020-2021)
- Team lead, development of principles on ecosystem restoration for the UN Decade on Ecosystem Restoration (2021)

- Advisor, Westfield University and the Massachusetts Office of Ecological Restoration on a proposal for developing B.S. and M.S. programs in Ecological Restoration in Massachusetts (2016)
 - Reviewer, curricular proposal for establishment of a M.S. Program in Restoration Ecology at Simon Fraser and British Columbia Institute of Technology (joint program) (2015).
 - Member, Monitoring Subcommittee of the Southwest Crown of the Continent (SWCC) Collaborative Forest Landscape Restoration Project (CFLRP) (2010-2016).
 - Advisory Board Member, Ecological Restoration Institute, University of Victoria, Victoria, B.C. Canada (2009-2013).
 - Invited Testifier, United States House of Representatives, Subcommittee on Forests and Forest Health, hearing on National Environmental Policy Act exemptions for forest restoration treatments. (1998).
 - Participant, meetings of the “Committee of Scientists” appointed to provide scientific and technical advice to the Secretary of Agriculture and the Chief of the Forest Service on improvements that can be made to the National Forest System Land and Resource Management planning process. (1998).
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