# James D. Johnston

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### **CURRENT POSITION**

2022 to present. Assistant Professor (Senior Research), College of Forestry, Oregon State University, Corvallis, OR

### **EDUCATION**

May 2016. Doctor of Philosophy, Forest Science, Oregon State University, Corvallis, OR; Dissertation: Forest successional and disturbance dynamics in the southern Blue Mountains of Oregon; advised by K. Norman Johnson

October 2008. Master of Science, Forest Resources, Oregon State University Oregon State University, Corvallis, OR; Thesis: Nonequilibrium ecosystem dynamics: management implications for state forests of Oregon; advised by G.L. Achterman and K. Norman Johnson

June 1996. Bachelor of Arts, History, University of Oregon, Eugene, OR; Thesis: Forging the super-power economy: State-building in the USSR 1922-1936; advised by R.A. Kimball.

#### REFERED PUBLICATIONS

- Margolis, E.Q., C.H. Guiterman, R.D. Chavardès, J.D. Coop, K. Copes-Gerbitz, D.A. Dawe, D.A. Falk, **J.D. Johnston**, E. Larson, L. Hang, J.M. Marschall, C.E. Naficy, A.T. Naito, M.A. Parisien, S.A. Parks, J. Portier, H.M. Poulos, K.M. Robertson, J.H. Speer, M. Stambaugh, T.W. Swetnam, A.J. Tepley, I. Thapa, C.D. Allen, Y. Bergeron, L.D. Daniels, P.Z. Fulé, D. Gervais, M.P. Girardin, G.L. Harley, J.E. Harvey, K.M. Hoffman, et al. 2022. The North American tree-ring fire-scar network. Ecosphere 13(7), e4159.
- M.J. Reilly, A. Zuspan, J.S. Halofsky, C. Raymond, A. McEvoy, A. Dye, D.C. Donato, J. Kim, B. Potter, N. Walker, R. Davis, C.J. Dunn, D.M. Bell, M. Gregory, **J.D. Johnston**, B.J. Harvey, J.E. Halofsky, B. Kerns. 2022. Cascadia Burning: Ecological perspectives on the historic, but not historically unprecedented, 2020 wildfires in temperate rainforests of the Pacific Northwest, USA. Ecosphere 13(6), e4070.
- **Johnston, J.D.**, and A.A. Lindsay. 2022. Development of tools to age grand fir to aid in collaborative restoration of federal lands in eastern Oregon. Journal of Forestry.
- **Johnston, J.D.**, J.H. Olszewski, B.A. Miller, M.R. Schmidt, M.J. Vernon, and L.M. Ellsworth. 2021. Mechanical thinning without prescribed fire moderates wildfire behavior in

- an eastern Oregon, USA ponderosa pine forest. Forest Ecology and Management 501:119674
- Hogland, J., C.J. Dunn, and **J.D. Johnston**. 2021. 21st Century Planning Techniques for Creating Fire-Resilient Forests in the American West. Forests 12(8):1084.
- Hagmann, R.K., P.F. Hessburg, S.J. Prichard, N.A. Povak, P.M. Brown, P.Z. Fulé, R.E. Keane E.E. Knapp, J.M. Lydersen, K.L. Metlen, M.J. Reilly, A.J. Sánchez Meador, S.L. Stephens, J.T. Stevens, A.H. Taylor, L.L. Yocom, M.A. Battaglia, D.J. Churchill, L.D. Daniels, D.A. Falk, P. Henson, J.D. Johnston, M.A. Krawchuk, C.R. Levine, G.W. Meigs, A.G. Merschel, M.P. North, H.D. Safford, T.W. Swetnam, A.E.M. Waltz. 2021. Evidence for widespread changes in the structure, composition, and fire regimes of western North American forests. Ecological Applications <a href="https://doi.org/10.1002/eap.2431">https://doi.org/10.1002/eap.2431</a>
- **Johnston, J.D.**, J.A. Kilbride, G.W. Meigs, R.E. Kennedy, and C.J. Dunn. 2021. Does conserving roadless wildland increase wildfire activity in western U.S. national forests?. Environmental Research Letters <a href="https://doi.org/10.1088/1748-9326/ac13ee">https://doi.org/10.1088/1748-9326/ac13ee</a>.
- **Johnston, J.D.**, S.M. Greenler, M.J. Reilly, M.R. Webb, A.G. Merschel, K.N. Johnson, and J.F. Franklin. 2021. Conservation of dry forest old growth in eastern Oregon. Journal of Forestry 1:13.
- **Johnston**, **J.D**., R.K. Hagmann, A.G. Merschel, S.T. Seager, J.F. Franklin, and K.N. Johnston. 2021. General Commentary: Large Trees Dominate Carbon Storage in Forests East of the Cascade Crest in the United States Pacific Northwest. Frontiers in Forests and Global Change 4:653774
- **Johnston, J.D.**, S.M. Greenler, B.A. Miller, M.J. Reilly, A.A. Lindsay, and C.J. Dunn. 2021. Diameter limits impede restoration of historical conditions in dry mixed-conifer forests of eastern Oregon, USA. Ecosphere 12(2):e03394.10.1002/ecs2.3394
- Lindsay, A.A., and **J.D. Johnston**. 2020. Using historical reconstructions of moist mixed conifer forests to inform forest management on the Malheur National Forest. In: Pile, Lauren S.; Deal, Robert L.; Dey, Daniel C.; Gwaze, David; Kabrick, John M.; Palik, Brian; Schuler, Thomas M., comps. The 2019 National Silviculture Workshop: a focus on forest management-research partnerships. Gen. Tech. Rep. NRS-P-193. Madison, WI: U.S. Department of Agriculture, Forest Service, Northern Research Station: 23-33. https://doi.org/10.2737/NRS-GTR-P-193-paper4.
- Downing, W.M., **J.D. Johnston**, M.A. Krawchuk, A.G. Merschel, and J.H. Rausch. 2020 Disjunct and decoupled? The persistence of a fire sensitive conifer species in a historically frequent fire landscape. Journal for Nature Conservation.
- Shabir, A.H., J. Zhang, **J.D. Johnston**, S.A. Sarkodie, J.A. Lutz., and X. Liu 2020. Predicting the influence of climate on grassland area burned in Xilingol, China with dynamic simulations of autoregressive distributed lag models. PLOS ONE 15(4),e0229894.

- Harley, G.L., E.K. Heyerdahl, **J.D. Johnston**, and D.L. Olson. 2020. Riparian and adjacent upland forests burned synchronously during dry years in eastern Oregon (1650-1900 CE), USA. International Journal of Wildland Fire.
- Kroll, A.J., **J.D. Johnston**, T.D. Stokely, and G.W. Meigs. 2020. From the ground up: managing young forests for a range of ecosystem outcomes. Forest Ecology and Management 464:118055.
- Dunn, C.J., C.D. O'Connor, J. Abrams, M.P. Thompson, D.E. Calkin, **J.D. Johnston**, R. Stratton, and J. Gilbertson-Day. 2020. Wildfire risk science facilitates adaption of fire prone social-ecological systems to the new fire reality. Environmental Research Letters 15(2):025001.
- Dunn, C.J., **J.D. Johnston**, M.J. Reilly, R.A. Miller, and J.D. Bailey. 2020. How does tree regeneration respond to mixed-severity fire in the western Oregon Cascades, USA? Ecosphere 11:(1)e03003. 10.1002/ecs2.3003.
- Shabbir, A.H., J. Zhang, X. Liu, J.A. Lutz, C. Valencia, and **J.D. Johnston**. 2019. Determining the sensitivity of grassland area burned to climate variation in Xilingol, China with an autoregressive distributed lag approach. International Journal of Wildland Fire 28(8). https://doi.org/10.1071/WF18171.
- **Johnston, J.D.**, C.J. Dunn, and M.J. Vernon. 2019. Tree traits influence response to fire severity in the western Oregon Cascades. Forest Ecology and Management 433:690-698.
- **Johnston, J.D.**, C.J. Dunn, M.J. Vernon, J.D. Bailey, B.A. Morrisette, and K. Morici. 2018. Restoring historical forest conditions in a diverse inland Pacific Northwest landscape. Ecosphere 9(8).
- **Johnston, J.D.**, J.D. Bailey, C.J. Dunn, and A.A. Lindsay. 2017. Historical fire-climate relationships in contrasting interior Pacific Northwest forest types. Fire Ecology 13(2).
- **Johnston, J.D.** 2017. Forest succession along a productivity gradient following fire exclusion. Forest Ecology and Management 392:45-57.
- **Johnston, J.D.**, J.D. Bailey, and C.J. Dunn. 2016. Influence of fire disturbance and biophysical heterogeneity on pre-settlement ponderosa pine and mixed conifer forests. Ecosphere 7(11).

### **BOOKS AND BOOK CHAPTERS**

Reilly, M.J., J.E. Halofsky, M. Krawchuk, D. Donato, P. Hessburg, **J. Johnston**, A. Merschel, M. Swanson, J. Halofsky, T.A. Spies. 2021. Fire ecology and management in forests of the Pacific Northwest. In: Eds. B.S. Collins and C.H. Greenberg, Fire Ecology and Management: Past, Present, and Future of US Forested Ecosystems. Springer Nature.

- **Johnston, J.D.** In press. The Salvage Rider: Logging without laws, protest without limits. *In* K.N. Johnson and J.F. Franklin, The Northwest Forest Plan. Oregon State University Press, Corvallis, OR.
- Franklin, J.F., K.N. Johnson, D. J. Churchill, K. Hagmann, D. Johnson, and **J.D. Johnston**. 2013. Restoration of dry forests in eastern Oregon: a field guide. The Nature Conservancy, Portland, OR.
- Romano, C. and **J.D. Johnston**. 2007. Columbia Highlands: Exploring Washington's Last Frontier. Mountaineers Book, Seattle, WA.

### REPORTS AND OTHER SCHOLARLY CONTRIBUTIONS

Bertone-Riggs, T. and **J.D. Johnston**. 2021. Fighting Fire with Fire: Policy Options to Increase the Use of Prescribed Fire on National Forests. Rural Voices for Conservation Coalition.

### **SELECTED GRANTS**

August 2022. National Science Foundation Human-Environment and Geographical Sciences Program. Investigating the historical dynamics of Indigenous forest stewardship in a western Oregon Cascades landscape—\$399,886 (PI: M.R. Coughlan; co-PIs: B.R. Johnson, K. Derr, **J.D. Johnston**).

August 2022. The Nature Conservancy. Rogue Basin Historical Reconstructions—\$70,000 (PI: **J.D. Johnston**; co-PI: Kerry Metlen, the Nature Conservancy).

June 2022. USDA Forest Service Westside Fire Initiative. Historical Role of Fire in Westside Forest of the Pacific Northwest — \$85,000 (PI: **J.D. Johnston**; co-PI: A.G. Merschel, USDA Forest Service).

April 2022. Collaborative Forest Landscape Restoration Program, Southern Blues Forest Vegetation and Fuels Project — \$160,000 (PI: **J.D. Johnston**; co-PIs: M.A. Krawchuk, Oregon State University, and A. Lindsay, Malheur National Forest).

February 2022. Oregon Department of Forestry Federal Forest Restoration Technical and Science Support. Evaluating critical landscape-scale ecosystem functions across the Malheur National Forest—\$60,000 (PI: **J.D. Johnston**; co-PI: John Hogland, USDA Forest Service).

February 2022. Oregon Department of Forestry Federal Forest Restoration Technical and Science Support. Resilient forest references to accelerate the quality, pace, and scale of forest restoration in the Rogue Basin of southwestern Oregon— \$50,000 (PI: **J.D. Johnston**; co-PI: Kerry Metlen, the Nature Conservancy).

November 2021. USDA National Institute of Food and Agriculture. Quantifying old-growth mortality in eastern Oregon— \$647,857 (PI: **J.D. Johnston**; co-PI: D.E. Ulrich, Montana State University).

April 2021. Collaborative Forest Landscape Restoration Program, Southern Blues Forest Vegetation and Fuels Project — \$139,000 (PI: **J.D. Johnston**; co-PIs: M.A. Krawchuk, Oregon State University, and J. Rausch, Malheur National Forest).

March 2021. National Council for Air and Stream Improvement, 2020 westside fire synthesis and quantitative wildfire risk assessment and mitigation framework— \$20,076 (PI: **J.D. Johnston**; co-PI: C.J. Dunn, Oregon State University).

June 2020. Collaborative Forest Landscape Restoration Program, Southern Blues Forest Vegetation and Fuels Project — \$145,000 (PI: **J.D. Johnston**; co-PIs: B.A. Miller, University of Victoria and J. Rausch, Malheur National Forest).

June 2020. USDA Forest Service Westside Fire Initiative. Historical Role of Fire in Westside Forest of the Pacific Northwest — \$150,000 (PI: **J.D. Johnston**; co-PI: Andrew Merschel, USDA Forest Service).

March 2020. Oregon Department of Fish and Wildlife Federal Aid in Wildlife Restoration Grant — \$56,937 (PI: **J.D. Johnston**).

February 2020. Oregon Department of Forestry Federal Forest Restoration Technical and Science Support — \$67,951 (PI: **J.D. Johnston**; co-PI: S. Altemus-Pope, Southern Willamette Forest Collaborative).

February 2020. Oregon Department of Forestry Federal Forest Restoration Technical and Science Support — \$30,000 (PI: **J.D. Johnston**; co-PI: B. Cate, Harney County Restoration Collaborative).

May 2019. Collaborative Forest Landscape Restoration Program, Southern Blues Forest Vegetation and Fuels Project — \$124,982 (PI: **J.D. Johnston**; co-PIs: B.A. Miller, University of Victoria and J. Rausch, Malheur National Forest).

October 2018. Accelerated Restoration Science Delivery, Blue Mountains Forest Partners (Phase II) —\$27,127 (PI: **J.D. Johnston**; co-PI: A.A. Lindsay, Malheur National Forest).

June 2018. Oregon Department of Forestry Federal Forest Restoration Technical and Science Support — \$66,999 (PI: **J.D. Johnston**; co-PI: A.G. Merschel, Oregon State University).

May 2018. Collaborative Forest Landscape Restoration Program, Southern Blues Forest Vegetation and Fuels Project — \$125,211 (PI: **J.D. Johnston**; co-PIs: B.A. Miller, University of Victoria and J. Rausch, Malheur National Forest).

August 2017. Accelerated Restoration Science Delivery, Blue Mountains Forest Partners (Phase I) —\$72,265 (PI: **J.D. Johnston**; co-PI: A.A. Lindsay, Malheur National Forest).

April 2017. Collaborative Forest Landscape Restoration Program, Southern Blues Forest Vegetation and Fuels Project — \$124,483 (PI: **J.D. Johnston**; co-PIs: B.A. Miller, University of Victoria and J. Rausch, Malheur National Forest).

June 2016. Northeast Oregon Forests Resource Advisory Committee, Old Tree Conservation Program — \$102,356 (PI: **J.D. Johnston**; co-PI: M.J. Vernon, Humboldt State University).

March 2016. Collaborative Forest Landscape Restoration Program, Southern Blues Forest Vegetation and Fuels Project — \$68,211 (PI: **J.D. Johnston**; co-PIs: B.A. Miller, University of Victoria and J. Rausch, Malheur National Forest).

March 2015. Collaborative Forest Landscape Restoration Program, Southern Blues Forest Vegetation and Fuels project — \$89,938 (PI: **J.D. Johnston**; co-PI: J. Rausch, Malheur National Forest).

March 2015. Oregon State University Research Reserve Equipment Fund, Dendrochronolgy Lab Equipment — \$15,600 (PI: **J.D. Johnston**; co-PIs: J H.S.J. Zald, and A.G. Merschel, Oregon State University).

### **RESEARCH EXPERIENCE**

2016-2022. Research Associate, Department of Forest Ecosystems and Society, Oregon State University, Corvallis, OR

2016-2013. Graduate Research Assistant, Department of Forest Ecosystems and Society, Oregon State University, Corvallis, OR

2013-2009. Research Assistant, Institute for Natural Resources, Oregon State University, Corvallis, OR

### **TEACHING AND COURSE DEVELOPMENT**

Winter 2021. Forest Law Seminar (FOR 599), Oregon State University, Corvallis, OR

Winter 2019. Forest Policy (FOR 460), Oregon State University, Corvallis, OR

Winter 2019. Topics in Wildland Fire (FOR 346), Oregon State University, Corvallis, OR

Winter 2018. Forest Policy (FOR 460) (with G. Huntington), Oregon State University, Corvallis, OR

Spring 2017. Topics in Wildland Fire (FOR 346), Oregon State University, Corvallis, OR

Spring 2014. Fire Ecology and Effects (FOR 209), Central Oregon Community College, Bend, OR

Winter 2013. Forest Policy (FOR 460) (with K. Johnson), Oregon State University, Corvallis, OR

Spring 2013. Managing for Ecosystem Services (FOR 599), Oregon State University, Corvallis, OR

Spring 2013. Conflict Resolution and Collaboration (FOR 360) (with K. Johnson), Oregon State University, Corvallis, OR

Spring 2012. Forest Policy Analysis (FOR 561) (with K. Johnson), Oregon State University, Corvallis, OR

Spring 2012. Conflict Resolution and Collaboration (FOR 360) (with K. Johnson), Oregon State University, Corvallis, OR

Winter 2012. Forest Policy (FOR 460) (with K. Johnson), Oregon State University, Corvallis, OR

Spring 2011. Managing Ecosystem Services in the McKenzie Watershed (GEO 599) (with H. Gosnell), Oregon State University, Corvallis, OR

Spring 2011. Ecosystem Services from Private Forestlands (FOR 599), Oregon State University, Corvallis, OR

Winter 2011. Forest Policy (FOR 460) (with K. Johnson), Oregon State University, Corvallis, OR

### **SELECTED ACADEMIC PRESENTATIONS**

March 17, 2022. **J.D. Johnston**. New fire histories from the Western Oregon Cascades. Northwest Science Association, Humboltd State University, Arcata, CA (remote).

March 25, 2021. **J.D. Johnston**. Historical fires and future implications: 2020 fires in context. Oregon Chapter of the Wildlife Society, Portland, OR (remote).

February 6, 2020. Kroll, A.J., **J.D. Johnston**, T.D. Stokely, and G.W. Meigs. From the ground up: managing young forests for a range of ecosystem outcomes. Oregon Chapter of the Wildlife Society, Eugene, OR.

November 20, 2019. **Johnston, J.D**. (plenary speaker). A Westside story: New fire histories from super-productive western Oregon Douglas-fir forests. 8<sup>th</sup> International Fire Ecology and Management Congress, Tucson, AZ.

November 20, 2019. **Johnston, J.D**. Is Forest Service roadless management creating divergent fire regimes?  $8^{th}$  International Fire Ecology and Management Congress, Tucson, AZ.

October 17, 2019. **Johnston, J.D.** Monitoring implementation of restoration treatments across the Malheur National Forest. Southern Blues Science and Monitoring Workshop, John Day, OR

October 17, 2019. Downing, W.M., **J.D. Johnston**, M.A. Krawchuk, A.G. Merschel, and J. Rausch. Regeneration following fire in the Blue Mountains. Southern Blues Science and Monitoring Workshop, John Day, OR

May 23, 2019. Lindsay, A. and **J.D. Johnston**. Using historical reconstructions of moist mixed conifer forests to inform forest management on the Malheur National Forest. National Silviculture Workshop, Bemidji, MN.

May 1, 2019. Bailey, J. D. and **J.D. Johnston**. Quantifying resiliency in dry forests of the American West. International Fire Behavior and Fuels Conference, Albuquerque, NM.

April 17, 2019. **Johnston, J.D.** Wildfire effects: past, present, and future. Oregon Society of American Foresters Annual Meeting, Lebanon, OR.

October 6, 2018. **Johnston, J.D.** Historical Fire Regimes of Oregon, Society of American Foresters National Convention, Portland, OR.

October 5, 2018. **Johnston, J.D.** Collaborative Federal Forest Restoration in Eastern Oregon, Society of American Foresters National Convention, Portland, OR.

May 22, 2018. **Johnston, J.D.** Historical fire disturbance regimes and implications for forest restoration. Association for Fire Ecology and International Association of Wildland Fire, The Fire Continuum Conference. Missoula, MT.

March 1, 2018. **Johnston, J.D.** Collaborative forest restoration in the Blue Mountains. Forest Health in Oregon: State of the State. Oregon State University. Corvallis, OR.

August 8, 2017. Miller, B.A. and **J.D. Johnston**. A collaborative approach to restoration: Fuel reduction in dry mixed conifer forests of Eastern Oregon, Ecological Society of America, Portland, OR.

April 8, 2016. **Johnston, J.D.** and B. A. Miller. South Blues CFLRP Forest Vegetation and Fuels Monitoring, Society for Ecological Restoration, Portland, OR.

March 25, 2016. **Johnston, J.D.** Successional accretion along a productivity gradient, Southern Blue Mountains. Northwest Science Association, Bend, OR.

July 8, 2015. **Johnston, J.D.** Successional and disturbance dynamics in mixed conifer forests of the southern Blue Mountains. International Association for Landscape Ecology, Portland, OR.

April 30, 2015. **Johnston, J.D.** Paleoecological perspectives on dry forest restoration. Oregon Chapter of the Wildlife Society and Oregon Society of American Foresters, 2015 Joint Annual Meeting, Eugene, OR.

### **SELECTED COMMUNITY PRESENTATIONS**

March 17, 2022. **J.D. Johnston**. Blue Mountains Forest Partners Zones of Agreement, Blue Mountains Forest Partners, John Day, OR (remote).

March 10, 2022. **J.D. Johnston**. Old growth of eastern Oregon. Central Oregon Society of American Foresters, Bend, OR (remote).

February 23, 2022. E.J. Davis, M. Webb, **J.D. Johnston**, S.J. Brown, Z. Williams. A case study of collaboration to restore fire-adapted forests in eastern Oregon. Cascadia Wildfire and Urban Smoke Working Group, Portland, OR (remote).

Feb. 3, 2022. **J.D. Johnston**. Historical Fire Regimes of Western Oregon. Department of Geography Seminar, University of Oregon, Eugene, OR.

January 5, 2022. D. Hannibal and **J.D. Johnston**. The Black Butte Fire and BMFP Restoration Treatments, Harney County Restoration Collaborative, Burns, OR (remote).

November 22, 2021. **J.D. Johnston**. Benefits of forest restoration to forest values, Wallowa County Natural Resource Advisory Committee, Enterprise, OR (remote).

November 18, 2021. **J.D. Johnston**. Integrated Zones of Agreement for Landscape Restoration on the Malheur National Forest. Blue Mountains Forest Partners, John Day, OR (remote).

November 18, 2021. Regeneration and Recovery after Fire, Panel discussion with **J.D. Johnston**, J.D. Bailey, A. Cowan, and L. Muszynski. Educators Day, Oregon State University. Corvallis, OR.

November 17, 2021. **J.D. Johnston**. Monitoring and Adaptive Management in the Southern Blue Mountains, Pinchot Partnership, Packwood, WA (remote).

November 9, 2021. **J.D. Johnston** and C.J. Dunn. Megafires in super-productive forests of western Oregon. National Council for Air and Stream Improvement, winter meeting of the Western Sustainable Forestry Task Group, Seattle, WA (remote).

August 19, 2021. **J.D. Johnston**. Historical Openings on the Malheur National Forest. Blue Mountains Forest Partners, John Day, OR (remote).

August 4, 2021. K. Hagmann, A. Merschel, P. Hessburg, **J.D. Johnston**. Old growth on the eastside, Sustainable Northwest, Forest Collaboratives Workshops Series, Portland, OR (remote).

July 6, 2021. B. Johnson, **J.D. Johnston**, and M. Juillerat. Restoring Ancient Grasslands of the Upper Willamette, Sustainable Northwest, Forest Collaboratives Workshops Series, Portland, OR (remote).

June 17, 2021. **J.D. Johnston**. Fuel reduction thinning in the absence of fire. Blue Mountains Forest Partners, John Day, OR (remote).

May 21, 2021. **J.D. Johnston**. The future of large fire on the Willamette National Forest, Southern Willamette Forest Collaborative, Community Wildfire Night, Oakridge, OR.

May 17, 2021. **J.D. Johnston**. Monitoring and Adaptive Management in the Southern Blue Mountains, Sustainable Northwest, Forest Collaboratives Workshops Series, Portland, OR (remote).

April 28, 2021. **J.D. Johnston**. Fire risk in the western Cascades: Past, Present, and Future. National Council for Air and Stream Improvement, spring meeting of the Western Sustainable Forestry Task Group, Seattle, WA (remote).

April 19, 2021. **J.D. Johnston**. Historical fires in the Rigdon landscape. Southern Willamette Forest Collaborative, Oakridge, OR (remote).

April 14, 2021. **J.D. Johnston**. Historical Openings on the Malheur National Forest. Harney County Restoration Collaborative, Burns, OR (remote).

March 18, 2021. **J.D. Johnston**. Identifying old grand fir in eastern Oregon. Blue Mountains Forest Partners, John Day, OR (remote).

December 15, 2020. C.J. Dunn and **J.D. Johnston**. Sustainable Wood Story: Wildfire and Fire Ecology. Sustainable Northwest Wood, Portland, OR (remote).

November 10, 2020. **J.D. Johnston**. Blue Mountains Forest Partners Multi-Party Monitoring. CFLRP Community of Practice, Flagstaff, Arizona (remote).

September 3, 2020. **J.D. Johnston**: Historical successional and disturbance dynamics across productivity gradients in Oregon. Wasco County Forest Collaborative, The Dalles, OR (remote).

July 21, 2020. Greenler, S.M, and **J.D. Johnston**: The historical range of variability and implications for management. Ochoco Forest Restoration Collaborative, Prineville, OR (remote).

May 11, 2020. **J.D. Johnston**: Science Forum: Adapting the wildlife standard of the Eastside Screens. USDA Forest Service (remote).

January 21, 2020. **Johnston, J.D**. A Westside Story: A history of fire in western Oregon. South Santiam Watershed Council, Lebanon, OR.

October 21, 2019. **Johnston, J.D**. A story of fire, past and future. McKenzie Flyfishers, Springfield, OR.

May 22, 2019. **Johnston, J.D.** Historical fire regimes of the Willamette National Forest, Sierra Club, Eugene, OR.

May 13, 2019. **Johnston, J.D.** Historical fire regimes of the Willamette National Forest, Willamette Forest Collaborative Workshop, Springfield, OR.

February 23, 2019. **Johnston, J.D.** What are we doing?: A CFLRP implementation status report, Harney County Restoration Collaborative, Burns, OR.

May 2, 2019. **Johnston, J.D.** Historical fire regimes of the Willamette National Forest, Southern Willamette Forest Collaborative, Oakridge, OR

April 12, 2019. **Johnston, J.D.** Dry forest historical successional and disturbance dynamics. Pacific Northwest Forest Collaboratives Workshop, Hood River, OR.

April 12, 2019. **Johnston, J.D.** Management of westside forests. Pacific Northwest Forest Collaboratives Workshop, Hood River, OR.

July 30, 2018. **Johnston, J.D.** The History and Future of Wildfire in Oregon, Sierra Club, Eugene, OR.

May 17, 2018. **Johnston, J.D.** Fire Trends on the Malheur National Forest. Blue Mountains Forest Partners, John Day, OR.

May 16, 2018. **Johnston, J.D.** A Community Discussion on Managing Fire. High Desert Partnership, Burns, OR.

March 15, 2018. **Johnston, J.D.** Forest restoration in the Ragged Ruby planning area. Blue Mountains Forest Partners, John Day, OR.

November 29, 2017. Forest Fires in Oregon. Panel discussion with **Johnston, J.D.**, B. C. McComb, and K. Proctor. Society of Women Engineers. Corvallis, OR.

May 22, 2017. **Johnston, J.D.** Monitoring eastside forest restoration projects. Ochoco Forest Restoration Collaborative, Bend, OR.

April 3, 2017. **Johnston, J.D.** Relic landscapes of the Willamette River. Southern Willamette Forest Collaborative, Oakridge, OR.

March 30, 2017. **Johnston, J.D.** K. E. Morici, B. A. Miller, J. D. Bailey. South Blues CFLRP Forest Vegetation and Fuels (FVF) Project. Pacific Northwest Forest Collaboratives Workshop, Hood River, OR.

May 18, 2016. **Johnston, J.D**, B. A. Miller, J. D. Bailey. South Blues CFLRP Forest Vegetation and Fuels Project. Malheur Monitoring Symposium, John Day, OR.

March 31, 2016. **Johnston, J.D**. Adaptive Management on the Malheur National Forest. Region 6 Forest Collaboratives Workshop, Hood River, OR.

March 17, 2016. **Johnston, J.D**. Managing moist mixed conifer forests. Blue Mountains Forest Partners, John Day, OR.

February 23, 2016. **Johnston, J.D**. Historical successional and disturbance dynamics in the southern Blue Mountains, Harney County Restoration Collaborative, Burns, OR.

July 21, 2015. **Johnston, J.D** and B. A. Miller. Ochoco Forest Restoration Vegetation and Fuels Monitoring. Ochoco Forest Restoration Collaborative Full Group Meeting, Prineville, OR.

#### **SERVICE AND OUTREACH**

2022. Peer-review panel for the USDA-NIFA Agriculture & Food Research Initiative Sustainable Agricultural Systems program.

2019 to present. Expert witness (wildland fire investigations), Oregon Department of Justice.

2019. Guest lecturer, Portland State University, Portland, OR.

2018 to present. Science consultant, University of Oregon Media Center for Science and Technology.

2017 to present. Science consultant to Southern Willamette Forest Collaborative (http://southwillamette.wixsite.com/swfc), Oakridge, OR.

2016 to present. Manuscript reviewer for *Ecosphere, Ecological Applications, Forest Ecology* and Management, International Journal of Wildland Fire, Journal of Environmental Management, Journal of Forestry, Methods in Ecology and Evolution, Regional Environmental Change, Remote Sensing of Environment, and Scientific Reports.

2016 to present. Volunteer, Center Against Rape and Domestic Violence, Corvallis, OR.

2016 to 2019. Instructor, National Advanced Silviculture Program.

2014 to present. Guest lecturer, Lewis and Clark School of Law, Portland, OR.

2011 to present. Science consultant to the Blue Mountains Forest Partners (http://www.bluemountainsforestpartners.org), John Day, OR.

2011 to present. Volunteer, Environmental Law Alliance Worldwide, Eugene, OR.

2011. International Fellow, Environmental Law Alliance Worldwide (consultant to the government of Liberia about development of environmental regulations governing the mining and timber industry).

2010. Member, Oregon Department of Forestry Scientific Advisory Team, providing support to review of science underpinning management plans for state forests.

#### MEDIA COVERAGE

March 1, 2022. Roadblocks on "The Oregon Way" to protecting state's rivers. The Daily Yonder (https://dailyyonder.com/roadblocks-on-the-oregon-way-to-protecting-states-rivers/2022/03/01/).

January 27, 2022. In wildfire 'pivot,' experts question federal focus. CQ News (https://plus.cq.com/shareExternal/doc/news-6440612/ZZ7jirmrpZpcM\_nfhPkuyTOrWb8?0).

January 5, 2022. This Vast Wildfire Lab Is Helping Foresters Prepare for a Hotter Planet. New York Times (https://www.nytimes.com/2022/01/05/climate/fire-forest-management-bootleg-oregon.html).

November 8, 2021. Scorched Earth: Will one-two punch of wildfire and drought change Oregon's forests for good? Salem Statesmen-Journal

(https://www.statesmanjournal.com/restricted/?return=https%3A%2F%2Fwww.statesmanjournal.com%2Fstory%2Fnews%2F2021%2F11%2F07%2Foregon-wildfires-drought-forests-climate-change-heat-wave-enivornmental-damage%2F6057748001%2F).

October 15, 2021. Interview with KPCW (https://www.kpcw.org/show/this-green-earth/2021-10-15/james-johnston-research-associate-at-oregon-state-university-oct-12-2021).

October 8, 2021. Impact of forest thinning on wildfires creates division. AP News (<a href="https://apnews.com/article/wildfires-science-business-fires-environment-a5bc4932be70d28ee408ea8102e3398c">https://apnews.com/article/wildfires-science-business-fires-environment-a5bc4932be70d28ee408ea8102e3398c</a>).

September 30, 2021. OSU study: NE Oregon Study: Mechanical forest thinning can reduce fire intensity but prescribed burns lengthen effectiveness. Bend Bulletin (<a href="https://www.cbbulletin.com/ne-oregon-study-mechanical-forest-thinning-can-reduce-fire-intensity-but-prescribed-burns-lengthen-effectiveness/">https://www.cbbulletin.com/ne-oregon-study-mechanical-forest-thinning-can-reduce-fire-intensity-but-prescribed-burns-lengthen-effectiveness/</a>).

September 29, 2021. OSU study: Thinning forests alone helps reduce wildfire risk, Oregon researchers say. KGW TV (<a href="https://www.kgw.com/article/news/local/wildfire/study-thinning-forests-reduces-wildfire-risk/283-d261de35-76cf-4a2c-bc65-c937ab735ffc">https://www.kgw.com/article/news/local/wildfire/study-thinning-forests-reduces-wildfire-risk/283-d261de35-76cf-4a2c-bc65-c937ab735ffc</a>).

September 27, 2021. OSU study: Thinning moderates forest fire behavior, even without prescribed burns – for a little while. KTVZ TV (<a href="https://ktvz.com/news/oregon-northwest/2021/09/27/osu-study-thinning-moderates-forest-fire-behavior-even-without-prescribed-burns-for-a-while/">https://ktvz.com/news/oregon-northwest/2021/09/27/osu-study-thinning-moderates-forest-fire-behavior-even-without-prescribed-burns-for-a-while/</a>).

September 27, 2021. Forestry experts call for smart, inclusive solutions to fire. KOIN TV (<a href="https://www.koin.com/news/wildfires/forestry-expert-oregonians-must-learn-to-live-with-wildfires/">https://www.koin.com/news/wildfires/forestry-expert-oregonians-must-learn-to-live-with-wildfires/</a>).

September 22, 2021. OSU Researchers predict wildfires will continue to get worse. KEZI TV (<a href="https://www.kezi.com/content/news/After-record-fire-season-Oregon-researchers-say-wildfires-will-only-get-worse-575369971.html">https://www.kezi.com/content/news/After-record-fire-season-Oregon-researchers-say-wildfires-will-only-get-worse-575369971.html</a>).

September 21, 2021. Oregon's large wildfires of recent years seen by OSU experts as precursor for future seasons. KTVZ TV (<a href="https://ktvz.com/news/2021/09/21/oregons-large-wildfires-of-recent-years-seen-by-osu-experts-as-precursor-for-future-seasons/">https://ktvz.com/news/2021/09/21/oregons-large-wildfires-of-recent-years-seen-by-osu-experts-as-precursor-for-future-seasons/</a>).

September 21, 2021. Oregon's large wildfires of recent years seen by OSU experts as precursor for future seasons. KTVZ TV (<a href="https://ktvz.com/news/2021/09/21/oregons-large-wildfires-of-recent-years-seen-by-osu-experts-as-precursor-for-future-seasons/">https://ktvz.com/news/2021/09/21/oregons-large-wildfires-of-recent-years-seen-by-osu-experts-as-precursor-for-future-seasons/</a>).

September 21, 2021. After record fire season, Oregon researchers say wildfires will only get worse. KGW8 TV (<a href="https://www.kgw.com/article/news/local/wildfire/experts-on-wildfires-preparation/283-cf27e582-91a6-44c9-b413-150aab3e77b8">https://www.kgw.com/article/news/local/wildfire/experts-on-wildfires-preparation/283-cf27e582-91a6-44c9-b413-150aab3e77b8</a>).

September 21, 2021. Oregon State University fire expert panel: Oregonians' mindset needs to expect, accept wildfires. *Register Guard* 

(https://www.registerguard.com/story/news/2021/09/21/fire-expert-panel-oregonians-need-adapt-future-includes-wildfire-oregon-state-university/5801249001/).

September 16, 2021. Clearing the tinderbox: As the climate warms, a huge forest experiment aims to reduce wildfire risk and find common ground between loggers and environmentalists. *Science* (<a href="https://www.science.org/content/article/huge-forest-experiment-aims-reduce-wildfires-can-it-unite-loggers-and-environmentalists">https://www.science.org/content/article/huge-forest-experiment-aims-reduce-wildfires-can-it-unite-loggers-and-environmentalists</a>).

August 25, 2021. Weather promising for fire season's end; winds could change that. KOIN TV (<a href="https://www.koin.com/news/wildfires/weather-promising-for-fire-seasons-end-winds-could-change-that/">https://www.koin.com/news/wildfires/weather-promising-for-fire-seasons-end-winds-could-change-that/</a>).

August 10, 2021. Exploding California Wildfires Rekindle Debate Over Whether to Snuff Out Blazes in Wilderness Areas or Let Them Burn. Inside Climate News (<a href="https://insideclimatenews.org/news/10082021/california-wildfires-dixie-fire-burn-containment/">https://insideclimatenews.org/news/10082021/california-wildfires-dixie-fire-burn-containment/</a>).

August 5, 2021. OSU scientists collaborate on road map for adapting dry forests to new fire regimes. KTVZ TV (<a href="https://ktvz.com/news/fire-alert/2021/08/05/osu-scientists-collaborate-on-road-map-for-adapting-dry-forests-to-new-fire-regimes/">https://ktvz.com/news/fire-alert/2021/08/05/osu-scientists-collaborate-on-road-map-for-adapting-dry-forests-to-new-fire-regimes/</a>).

August 4, 2021. Canada, U.S. seek new approach as blistering 2021 wildfire season drains resources. *The Globe and Mail* (<a href="https://www.theglobeandmail.com/canada/article-early-intense-wildfire-season-makes-canada-us-resource-sharing/">https://www.theglobeandmail.com/canada/article-early-intense-wildfire-season-makes-canada-us-resource-sharing/</a>).

July 23, 2021. 'A recipe for a catastrophic fire: How an Oregon blaze became the nation's largest. *New York Times* (<a href="https://www.nytimes.com/2021/07/22/us/oregon-bootleg-fire.html">https://www.nytimes.com/2021/07/22/us/oregon-bootleg-fire.html</a>).

July 22, 2021. Climate change of forest management? "Everyone is right." KOIN TV (<a href="https://www.koin.com/news/wildfires/climate-change-or-forest-management-everyone-is-right">https://www.koin.com/news/wildfires/climate-change-or-forest-management-everyone-is-right</a>).

July 21, 2021. Planned fires reduced damage of Oregon Wildfire, analysis shows. *The Christian Science Monitor* 

(https://www.csmonitor.com/Environment/2021/0721/Planned-fires-reduced-damage-of-Oregon-wildfire-analysis-shows?icid=rss).

July 20, 2021. The Bootleg Fire, the nation's biggest, gives scientists an unexpected experiment. National Public Radio

(https://www.npr.org/2021/07/20/1018522825/bootleg-wildfire-forest-management).

July 20, 2021. Thunderstorms and lightning threaten to spur more fires in U.S. west. *The Guardian* (https://www.theguardian.com/us-news/2021/jul/20/us-west-wildfires-bootleg-fire-oregon).

July 20, 2021. Monster wildfire tests years of forest management efforts. Associated Press (<a href="https://apnews.com/article/science-fires-environment-and-nature-oregon-weather-9a8021b4073fc50309ddf9bad479d956">https://apnews.com/article/science-fires-environment-and-nature-oregon-weather-9a8021b4073fc50309ddf9bad479d956</a>).

July 20, 2021. Extreme weather fuels Oregon wildfire, Bootleg Fire tops 388K acres; outside help sought. KTVZ TV (<a href="https://ktvz.com/news/fire-alert/2021/07/20/extreme-weather-fuels-oregon-wildfires-bootleg-fire-tops-388k-acres-outside-help-sought/">https://ktvz.com/news/fire-alert/2021/07/20/extreme-weather-fuels-oregon-wildfires-bootleg-fire-tops-388k-acres-outside-help-sought/</a>).

July 19, 2021. Experts see larger wildfires become more common. KATU TV (<a href="https://www.katu.com/news/local/experts-see-larger-wildfires-becoming-more-common">https://www.katu.com/news/local/experts-see-larger-wildfires-becoming-more-common</a>).

July 19, 2021. Size of Oregon wildfire underscores vastness of the U.S. West. Associated Press (<a href="https://apnews.com/article/science-fires-environment-and-nature-wildfires-3f102582aa78c2400a95374a2fb07529">https://apnews.com/article/science-fires-environment-and-nature-wildfires-3f102582aa78c2400a95374a2fb07529</a>).

July 15, 2021. OSU study: Roadless forests see more, more severe blazes, but fire resilience is the result. KTVZ TV (<a href="https://ktvz.com/news/oregon-northwest/2021/07/15/osu-study-roadless-forests-see-more-more-severe-blazes-but-fire-resilience-is-the-result/">https://ktvz.com/news/oregon-northwest/2021/07/15/osu-study-roadless-forests-see-more-more-severe-blazes-but-fire-resilience-is-the-result/</a>).

June 21, 2021. Experts say Oregon is drier now than it was at anytime in 2020. KOIN TV (<a href="https://www.koin.com/news/wildfires/experts-say-oregon-is-drier-now-than-it-was-this-time-in-2020/">https://www.koin.com/news/wildfires/experts-say-oregon-is-drier-now-than-it-was-this-time-in-2020/</a>).

March 9, 2021. OSU study: Tree cutting diameter limits hamper E. Oregon forest restoration. KTVZ TV (<a href="https://ktvz.com/news/environment/2021/03/09/osu-study-tree-cutting-diameter-limits-hamper-e-oregon-forest-restoration/">https://ktvz.com/news/environment/2021/03/09/osu-study-tree-cutting-diameter-limits-hamper-e-oregon-forest-restoration/</a>).

February 16, 2021. Finding common ground on active forest management. Blue Mountain Eagle (https://www.bluemountaineagle.com/news/finding-common-ground-on-active-forest-management/article d671fea0-6a34-11eb-a1ce-87830dd96961.html).

October 13, 2020. Experts say it is time to update fire suppression policies. National Public Radio (<a href="https://www.npr.org/2020/10/13/923170353/experts-say-its-time-to-update-fire-suppression-policies">https://www.npr.org/2020/10/13/923170353/experts-say-its-time-to-update-fire-suppression-policies</a>).

October 3, 2020. 'Timber Wars' episode 7: a way forward. Oregon Public Broadcasting (<a href="https://www.opb.org/tag/timberwars/">https://www.opb.org/tag/timberwars/</a>).

February 26, 2020. Four year since Trump's promise to boost timber, little has changed. KLCC (<a href="https://www.klcc.org/post/four-years-trumps-pledge-boost-timber-little-has-changed">https://www.klcc.org/post/four-years-trumps-pledge-boost-timber-little-has-changed</a>).

January 8, 2020. OSU develops tools to help land managers use risk-analysis to 'new wildfire reality.' KTVZ (<a href="https://ktvz.com/news/2020/01/08/osu-develops-tools-to-help-land-managers-use-risk-analysis-approach-to-new-wildfire-reality/">https://ktvz.com/news/2020/01/08/osu-develops-tools-to-help-land-managers-use-risk-analysis-approach-to-new-wildfire-reality/</a>).

November 19, 2019. Restoration in a Fire Forest: The Return of Fire, Northwest Fire Science Consortium, (<a href="https://www.youtube.com/watch?v=f7S2wEFeFC0&t=4s">https://www.youtube.com/watch?v=f7S2wEFeFC0&t=4s</a>).

October 12, 2019. Despite Trump campaign pledge, Oregon logging not increasing. *Bend Bulletin* (https://www.bendbulletin.com/localstate/7486691-151/despite-trump-campaign-pledge-oregon-logging-not-increasing).

September 25, 2019. Guest Column: Light it so you don't have to fight it. *Bend Bulletin* (<a href="https://www.bendbulletin.com/opinion/7453200-151/guest-column-light-it-so-you-dont-have">https://www.bendbulletin.com/opinion/7453200-151/guest-column-light-it-so-you-dont-have</a>).

October 10, 2018. Restoration in a Fire Forest: The Benefits of Burning, Northwest Fire Science Consortium,

(https://www.youtube.com/watch?v=yf6slNlMx6Q&feature=youtu.be).

July 26, 2018. Fire season: Fire professionals provide insight and advice about the summer fire season. *Eugene Weekly* (https://www.eugeneweekly.com/2018/07/26/fire-season/).

May 23, 2018. Fire management the focus of community discussion. *Burns Times-Herald*, (<a href="http://btimesherald.com/2018/05/23/fire-management-the-focus-of-community-discussion/">http://btimesherald.com/2018/05/23/fire-management-the-focus-of-community-discussion/</a>).

March 24, 2018. Forest issues need fact-based collaborative approach (opinion). *Bend Bulletin*, (http://www.bendbulletin.com/opinion/6103757-151/guest-column-forest-issues-need-fact-based-collaborative-approach).

January 24, 2018. Forestry prof says corridor lawsuit has holes. Wallowa County Chieftain, (<a href="http://www.wallowacountychieftain.com/local\_news/20180124/forestry-prof-says-corridor-lawsuit-has-holes">http://www.wallowacountychieftain.com/local\_news/20180124/forestry-prof-says-corridor-lawsuit-has-holes</a>).

December 10, 2017. Living with fire: New Oregon State research center focuses on fire prone landscapes. *Terra Magazine*, (<a href="http://terra.oregonstate.edu/2017/04/living-with-fire/">http://terra.oregonstate.edu/2017/04/living-with-fire/</a>).

August 20, 2016. Forest fuels pileup, not firefighter failure, made Canyon Creek fire a tragedy (opinion). *Oregonian*,

(http://www.oregonlive.com/opinion/index.ssf/2016/08/forest fuels pileup not firefi.ht ml).

### TRAINING OF HIGHLY QUALIFIED PERSONNEL

Graduate student supervision: PhD (2 complete)

Graduate student committee member: PhD (2 complete), MS (1 active, 2 complete)

Sponsored laboratory and field technicians (8 active, 68 completed)

## **A**WARDS

2021 Outstanding Faculty Award, Department of Forest Ecosystems and Society Laurels scholarship 2008-2009