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Curriculum Vitae

Appointments

Research Associate Professor, June 2016-, School of Environmental and Forest Sciences, University of Washington

Research Associate (post-doctoral appointment), 2010-2016, School of Environmental and Forest Sciences, University of Washington, JF Franklin supervisor.

Education

PhD, Univ. of Washington, June 2010, School of Forest Sciences, College of the Environment. Funded through a NASA graduate fellowship (Grant NNX07AN75H). Advisor: Jerry F. Franklin
PhD dissertation: Patterns of Forest Structural Complexity Studied with Airborne LiDAR Data.

Bachelor of Arts, General Arts and Sciences. The Pennsylvania State University, 1977.

Funding: $7.5M in 51 grants from 15 federal, state, local agencies, and non-government organizations since faculty appointment ; $2,3M previously as post-doctoral scholar and PhD student.

Google Scholar: 2853 citations, h-index = 25, i100-index = 12, i10-index = 35 (11/17/2023)

Published Peer-Reviewed Publications and Datasets

49. Chamberlain, C.P., Cova, G.R., **Kane, V.R**., Cansler, C.A., Kane, J.T., Bartl-Geller, B.N., van Wagtendonk, L., Jeronimo, S.M.A., Stine, P., North, M.P. Accepted. Sierra Nevada reference conditions: a dataset of contemporary reference sites and corresponding remote sensing-derived forest structure metrics for yellow pine and mixed-conifer forests. Data in Brief. Repository name: Forest Service Research Data Archive. doi.org/10.2737/RDS-2023-0027
48. Khatri-Chhetri, P., van Wagtendonk, L., Hendryx, S. M., & **Kane, V. R**. (2024). Enhancing individual tree mortality mapping: The impact of models, data modalities, and classification taxonomy. *Remote Sensing of Environment*, *300*, 113914. https://doi.org/10.1016/j.rse.2023.113914
47. Chamberlain, C.P., Cova, G.R., Cansler, C.A., North, M.P., Meyer, M.D., Jeronimo, S.M. and **Kane, V.R.**, 2023. Consistently heterogeneous structures observed at multiple spatial scales across fire-intact reference sites. Forest Ecology and Management, 550, p.121478. https://doi.org/10.1016/j.foreco.2023.121478
46. **Kane, V.R.**, Bartl-Geller, B.N., Cova, G.R., Chamberlain, C.P., van Wagtendonk, L., North, M.P. 2023. Where are the large trees? A census of Sierra Nevada large trees to determine their frequency and spatial distribution across three large landscapes. Forest Ecology and Management. Volume 546,2023,121351. https://doi.org/10.1016/j.foreco.2023.121351
45. Miller, C**.**, Harvey, B.J., **Kane, V.R.,** Moskal, L.M., Alvarado. E. Accepted. Linking remotely sensed data to continuous estimates of burn severity measured with the Composite Burn Index: A systematic review of empirical approaches. International Journal of Wildland Fire.
44. Cova, G., **Kane, V.R**., Prichard, S., North, M., Cansler, C.A. 2023. The outsized role of California's largest wildfires in changing forest burn patterns and coarsening ecosystem scale, Forest Ecology and Management. https://doi.org/10.1016/j.foreco.2022.120620 My PhD student-led paper; mentoring, conceptualization, analysis, writing]
43. Churchill, D.J., Jeronimo, S.M., Hessburg, P.F., Cansler, C.A., Povak, N.A., **Kane, V.R**., Lutz, J.A. and Larson, A.J., 2022. Post-fire landscape evaluations in Eastern Washington, USA: Assessing the work of contemporary wildfires. Forest Ecology and Management, 504, p.119796. https://doi.org/10.1016/j.foreco.2021.119796 Invited paper.

42. Cansler, C.A., **Kane, V.R.**, Bartl-Geller, B.N., Churchill, D.J., Hessburg, P.F., Povak, N.A., Lutz, J.A., Kane, J. and Larson, A.J., 2022. Postfire treatments alter forest canopy structure up to three decades after fire. *Forest Ecology and Management*, *505*, p.119872. (14 pages) https://doi.org/10.1016/j.foreco.2021.119872 Invited paper.
41. Larson, A.J., 2022. Churchill, D.J., Jeronimo, S.M., Hessburg, P.F., Cansler, C.A., Povak, N.A., **Kane, V.R.**, Lutz, J.A., 2022. Post-fire landscape evaluations in Eastern Washington, USA: Assessing the work of contemporary wildfires. Forest Ecology and Management, 504, p.119796. (19 pages) https://doi.org/10.1016/j.foreco.2021.119796 Invited paper.
40. Cansler, C.A., **Kane, V.R.**, Hessburg, P.F., Kane, J.T., Jeronimo, S.M., Lutz, J.A., Povak, N.A., Churchill, D.J. and Larson, A.J., 2022. Previous wildfires and management treatments moderate subsequent fire severity. *Forest Ecology and Management*, *504*, p.119764. (20 pages) https://doi.org/10.1016/j.foreco.2021.119764
39. Larson, A.J., Jeronimo, S.M., Hessburg, P.F., Lutz, J.A., Povak, N.A., Cansler, C.A., **Kane, V.R**. and Churchill, D.J., 2022. Tamm Review: Ecological principles to guide post-fire forest landscape management in the Inland Pacific and Northern Rocky Mountain regions. *Forest Ecology and Management*, *504*, p.119680. (19 pages) https://doi.org/10.1016/j.foreco.2021.119680 Invited paper.
38. Barber, N., Alvarado, E., **Kane, V.R.**, Mell, W.E. and Moskal, L.M., 2021. Estimating Fuel Moisture in Grasslands Using UAV-Mounted Infrared and Visible Light Sensors. *Sensors*, *21*(19), p.6350. (16 pages) https://doi.org/10.3390/s21196350
37. Chamberlain, C.P., **Kane, V.R.** and Case, M.J., 2021. Accelerating the development of structural complexity: lidar analysis supports restoration as a tool in coastal Pacific Northwest forests. *Forest Ecology and Management*, *500*, p.119641. (14 pages) https://doi.org/10.1016/j.foreco.2021.119641
36. Prichard, S.J., Hessburg, P.F., Hagmann, R.K., Povak, N.A., Dobrowski, S.Z., Hurteau, M.D., **Kane, V.R.**, Keane, R.E., Kobziar, L.N. and Kolden, C.A., North. M., Parks, S.A., Safford, H.D., Stevens, J.T., Yacom, L.L., Churchill, D.J., Gray, R. W., Huffman, DW., Lake, F.K., Khattri-Chhetri- P., 2021. Adapting western North American forests to climate change and wildfires: 10 common questions. *Ecological Applications*, *31*(8). (30 pages) https://doi.org/10.1002/eap.2433
35. Khatri-Chhetri, P., Hendryx, S.M., Hartfield, K.A., Crimmins, M.A., van Leeuwen, W.J. and **Kane, V.R**., 2021. Assessing vegetation response to multi-scalar drought across the Mojave, Sonoran, Chihuahuan deserts and Apache highlands in the Southwest United States. *Remote Sensing*, *13*(6), p.1103. (19 pages) https://doi.org/10.3390/rs13061103
34. Young, D.J., Jeronimo, S.M., Churchill, D.J., **Kane, V.R.** and Latimer, A.M., 2021. The utility of climatic water balance for ecological inference depends on vegetation physiology assumptions. *Global Ecology and Biogeography*, *30*(5), pp.933-949. https://doi.org/10.1111/geb.13277
33. Kramer, H.A., Jones, G.M., **Kane, V.R.,** Bartl-Geller, B., Kane, J.T., Whitmore, S.A., Berigan, W.J., Dotters, B.P., Roberts, K.N., Sawyer, S.C. and Keane, J.J., 2021. Elevational gradients strongly mediate habitat selection patterns in a nocturnal predator. *Ecosphere*, *12*(5), p.e03500. (22 pages) https://doi.org/10.1002/ecs2.3500
32. Griffey, V., Kellogg, B., Haugo, R. and **Kane, V.R**., 2021. Ownership Patterns Drive Multi-Scale Forest Structure Patterns across a Forested Region in Southern Coastal Oregon, USA. *Forests*, *12*(1), p.47. (24 pages) https://doi.org/10.3390/f12010047
31. Furniss, T.J., Larson, A.J., **Kane, V.R.** and Lutz, J.A., 2020. Wildfire and drought moderate the spatial elements of tree mortality. *Ecosphere*, *11*(8), p.e03214. https://esajournals.onlinelibrary.wiley.com/doi/10.1002/ecs2.3214
30. Hudak, A.T., Fekety, P.A., **Kane, V.R.**, Kennedy, R.E., Filippelli, S.K., Falkowski, M.J., Tinkham, W.T., Smith, A.M., Crookston, N.L., Domke, G.M. and Corrao, M.V., 2020. A carbon monitoring system for mapping regional, annual aboveground biomass across the northwestern USA. *Environmental Research Letters*, *15*(9), p.095003. (17 pages) https://doi.org/10.1088/1748-9326/ab93f9

29. Coop, J.D., Parks, S.A., Stevens-Rumann, C.S., Crausbay, S.D., Higuera, P.E., Hurteau, M.D., Tepley, A., Whitman, E., Assal, T., Collins, B.M., Davis, K.T. Dobrowski, S., Falk, D.A., Fornwalt, P.J., Fule, P.Z., Harvey, B.J., **Kane, V.R**., Littlefield, C.E., Margolis, E.Q., North, M., Parisien, M., Prichard, S., and Rodman, K.C., 2020. Wildfire-driven forest conversion in western North American landscapes. *BioScience*, *70*(8), pp.659-673. https://doi.org/10.1093/biosci/biaa061
28. Povak, N.A., Churchill, D.J., Cansler, C.A., Hessburg, P.F., **Kane, V.R.**, Kane, J.T., Lutz, J.A. and Larson, A.J., 2020. Wildfire severity and postfire salvage harvest effects on long-term forest regeneration. *Ecosphere*, *11*(8), p.e03199. (26 pages) https://doi.org/10.1002/ecs2.3199
27. LeFevre, M.E., Churchill, D.J., Larson, A.J., Jeronimo, S.M., Bass, J., Franklin, J.F. and **Kane, V.R.**, 2020. Evaluating restoration treatment effectiveness through a comparison of residual composition, structure, and spatial pattern with historical reference sites. *Forest Science*, *66*(5), pp.578-588. https://doi.org/10.1093/forsci/fxaa014
26. Moran, C.J., **Kane, V.R.** and Seielstad, C.A., 2020. Mapping forest canopy fuels in the western United States with LiDAR–Landsat covariance. *Remote Sensing*, *12*(6), p.1000. (37 pages) https://doi.org/10.3390/rs12061000
25. Kramer, R.D., Sillett, S.C., **Kane, V.R.** and Franklin, J.F., 2020. Disturbance and species composition drive canopy structure and distribution of large trees in Olympic rainforests, USA. *Landscape Ecology*, *35*(5), pp.1107-1125. https://doi.org/10.1007/s10980-020-01003-x
24. Jeronimo, S., Lutz, J.A., **Kane, V.R.**, Larson, A.J. and Franklin, J.F., 2020. Burn weather and three-dimensional fuel structure determine post-fire tree mortality. *Landscape Ecology*, *35*(4), pp.859-878. https://doi.org/10.1007/s10980-020-00983-0
23. Furniss, T.J., **Kane, V.R**., Larson, A.J. and Lutz, J.A., 2020. Detecting actual tree mortality with satellite-derived spectral indices and estimating landscape-level uncertainty. *Remote Sensing of Environment*, *237*(111497), pp.1000-1016. https://doi.org/10.1016/j.rse.2019.111497
22. Povak, N.A., **Kane, V.R.**, Collins, B.M., Lydersen, J.M. and Kane, J.T., 2020. Multi-scaled drivers of severity patterns vary across land ownerships for the 2013 Rim Fire, California. *Landscape Ecology*, *35*(2), pp.293-318. https://doi.org/10.1007/s10980-019-00947-z
21. **Kane, V.R.**, Bartl-Geller, B.N., North, M.P., Kane, J.T., Lydersen, J.M., Jeronimo, S.M., Collins, B.M. and Moskal, L.M., 2019. First-entry wildfires can create opening and tree clump patterns characteristic of resilient forests. *Forest Ecology and Management*, *454*, p.117659. https://doi.org/10.1016/j.foreco.2019.117659
20. Hessburg, P.F., Miller, C.L., Parks, S.A., Povak, N.A., Taylor, A.H., Higuera, P.E., Prichard, S.J., North, M.P., Collins, B.M., Hurteau, M.D., Larson, A.J., Allen, C.D., Stephens, S.L., Rivera-Herta, H., Stevens-Rumann, C.S., Daniels, L.D., Gedalof, Z., Gray, R.W., **Kane, V.R.**, Churchill, D.J., Hagmann, R.K., Spies, T.A., Cansler, C.A., Belote, R.T., Veblen, T.T., Battaglia, M.A., Hoffman, C. Skinner, C.N., Safford, H.D. and Salter, R.B., 2019. Climate, environment, and disturbance history govern resilience of western North American forests. *Frontiers in Ecology and Evolution*, *7*, p.239. https://doi.org/10.3389/fevo.2019.00239
19. Blomdahl, E.M., Thompson, C.M., Kane, J.T., **Kane, V.R.**, Churchill, D., Moskal, L.M. and Lutz, J.A., 2019. Forest structure predictive of fisher (*Pekania pennanti*) dens exists in recently burned forest in Yosemite, California, USA. *Forest Ecology and Management*, *444*, pp.174-186. https://doi.org/10.1016/j.foreco.2019.04.024
18. Jenkins, J., Lesmeister, D.B., Wiens, J.D., Kane, J.T., **Kane, V.R.** and Verschuyl, J., 2019. Three-dimensional partitioning of resources by congeneric forest predators with recent sympatry. *Scientific Reports*, *9*(1), pp.1-10. https://doi.org/10.1038/s41598-019-42426-0
17. Jeronimo, S.M., **Kane, V.R.**, Churchill, D.J., Lutz, J.A., North, M.P., Asner, G.P. and Franklin, J.F., 2019. Forest structure and pattern vary by climate and landform across active-fire landscapes in the montane Sierra Nevada. *Forest Ecology and Management*, *437*, pp.70-86. https://doi.org/10.1016/j.foreco.2019.01.033

16. Furniss, T.J., Larson, A.J., **Kane, V.R.** and Lutz, J.A., 2018. Multi-scale assessment of post-fire tree mortality models. *International Journal of Wildland Fire*, *28*(1), pp.46-61. https://doi.org/10.1071/WF18031
15. Bell, D.M., Gregory, M.J., **Kane, V.R.**, Kane, J., Kennedy, R.E., Roberts, H.M. and Yang, Z., 2018. Multiscale divergence between Landsat-and lidar-based biomass mapping is related to regional variation in canopy cover and composition. *Carbon balance and management*, *13*(1), pp.1-14. https://doi.org/10.1186/s13021-018-0104-6
14. Jeronimo, S.M., **Kane, V.R.**, Churchill, D.J., McGaughey, R.J. and Franklin, J.F., 2018. Applying LiDAR individual tree detection to management of structurally diverse forest landscapes. *Journal of Forestry*, *116*(4), pp.336-346. https://doi.org/10.1093/jofore/fvy023
13. Kennedy, R.E., Ohmann, J., Gregory, M., Roberts, H., Yang, Z., Bell, D.M., **Kane, V.R.**, Hughes, M.J., Cohen, W.B., Powell, S. and Neeti, N., 2018. An empirical, integrated forest biomass monitoring system. *Environmental Research Letters*, *13*(2), p.025004. https://doi.org/10.1088/1748-9326/aa9d9e
12. North, M.P., Kane, J.T., **Kane, V.R.**, Asner, G.P., Berigan, W., Churchill, D.J., Conway, S., Gutiérrez, R.J., Jeronimo, S., Keane, J. and Koltunov, A., 2017. Cover of tall trees best predicts California spotted owl habitat. *Forest Ecology and Management*, *405*, pp.166-178. https://doi.org/10.1016/j.foreco.2017.09.019
11. Lydersen, J.M., Collins, B.M., Brooks, M.L., Matchett, J.R., Shive, K.L., Povak, N.A., **Kane, V.R.** and Smith, D.F., 2017. Evidence of fuels management and fire weather influencing fire severity in an extreme fire event. *Ecological Applications*, *27*(7), pp.2013-2030. https://doi.org/10.1002/eap.1586
10. Stavros, E.N., Tane, Z., **Kane, V.R.**, Veraverbeke, S., McGaughey, R.J., Lutz, J.A., Ramirez, C. and Schimel, D., 2016. Unprecedented remote sensing data over King and Rim megafires in the Sierra Nevada Mountains of California. *Ecology*, *97*(11), pp.3244-3244. https://doi.org/10.1002/ecy.1577
9. **Kane, V.R.**, Cansler, C.A., Povak, N.A., Kane, J.T., McGaughey, R.J., Lutz, J.A., Churchill, D.J. and North, M.P., 2015. Mixed severity fire effects within the Rim fire: relative importance of local climate, fire weather, topography, and forest structure. *Forest Ecology and Management*, *358*, pp.62-79. https://doi.org/10.1016/j.foreco.2015.09.001
8. **Kane, V.R.**, Lutz, J.A., Cansler, C.A., Povak, N.A., Churchill, D.J., Smith, D.F., Kane, J.T. and North, M.P., 2015. Water balance and topography predict fire and forest structure patterns. *Forest Ecology and Management*, *338*, pp.1-13. https://doi.org/10.1016/j.foreco.2014.10.038
7. **Kane, V.R.**, North, M.P., Lutz, J.A., Churchill, D.J., Roberts, S.L., Smith, D.F., McGaughey, R.J., Kane, J.T. and Brooks, M.L., 2014. Assessing fire effects on forest spatial structure using a fusion of Landsat and airborne LiDAR data in Yosemite National Park. *Remote Sensing of Environment*, *151*, pp.89-101. https://doi.org/10.1016/j.rse.2013.07.041 Invited paper.
6. **Kane, V.R.**, Lutz, J.A., Roberts, S.L., Smith, D.F., McGaughey, R.J., Povak, N.A. and Brooks, M.L., 2013. Landscape-scale effects of fire severity on mixed-conifer and red fir forest structure in Yosemite National Park. *Forest Ecology and Management*, *287*, pp.17-31. https://doi.org/10.1016/j.foreco.2012.08.044
5. **Kane, V.R.**, Gersonde, R.F., Lutz, J.A., McGaughey, R.J., Bakker, J.D. and Franklin, J.F., 2011. Patch dynamics and the development of structural and spatial heterogeneity in Pacific Northwest forests. *Canadian Journal of Forest Research*, *41*(12), pp.2276-2291. https://doi.org/10.1139/x11-128
4. **Kane, V.R.**, Bakker, J.D., McGaughey, R.J., Lutz, J.A., Gersonde, R.F. and Franklin, J.F., 2010. Examining conifer canopy structural complexity across forest ages and elevations with LiDAR data. *Canadian Journal of Forest Research*, *40*(4), pp.774-787. https://doi.org/10.1139/X10-064
3. **Kane, V.R.**, McGaughey, R.J., Bakker, J.D., Gersonde, R.F., Lutz, J.A. and Franklin, J.F., 2010. Comparisons between field-and LiDAR-based measures of stand structural complexity. *Canadian Journal of Forest Research*, *40*(4), pp.761-773. https://doi.org/10.1139/X10-024

2. Lutz, J.A., Freund, J.A., Hagmann, R.K., **Kane, V.R.**, Larson, A.J. and Franklin, J.F., 2008. Mid-career graduate students in ecology. *Frontiers in Ecology and the Environment*, *6*(7), pp.392-393. https://doi.org/10.1890/1540-9295(2008)6[392:MGSIE]2.0.CO;2
1. Gillespie, A. R., Gilson, L., O'Neal, M. A., and **Kane, V. R**., 2006. A framework for estimating unresolved spectral shade. In J. A. Sobrino, ed., Second Recent Advances in Quantitative Remote Sensing, Publicacions de la Universitat de València, Spain, ISBN: 84-370-6533-X.

Non-peer Reviewed Publications

15. Chamberlain C.P., Cansler, C.A., Meigs, G., Churchill, D., **Kane, V.R.,** Kane, J.T., Begley, J. June 2023. Schneider Springs Final Report to the Washington state Department of Natural Resources.
14. Bartl-Geller, B. **Kane, V.R.** 2023. Exploring treatment alternatives for Galloway Project Area: Final report to the Nature Conservancy of California.
13. Cansler, C.A., **Kane, V.R.** September 2022. Rapid initial analysis: Did forest restoration treatments mitigate burn severity in the 2021 Bootleg Fire?
12. **Kane, V. R.,** Van Wagtendonk, L., and A. Brenner, A. 2022 A lidar's-eye view of how forests are faring, EOS, 103, Published on 29 April 2022. https://doi.org/10.1029/2022EO220218
11. Chamberlain, C., Saberi, S., **Kane, V.R.** 2021. Colville NF 2020 Monitoring Report. Interim report to the Colville National Forest project 19-JV-11261989-111.
10. Lutz, J.A., Larson, A.J., **Kane, V.R.** 2021 Using Multi-scale spatial data to improve predictions of immediate and delayed post-fire mortality. Final report to the Joint Fire Science Program project 16-1-04-02.
9. Larson, A.J., Cansler, C.A., **Kane, V.R.,** Churchill, D.J., Hessburg, P.F., Lutz, J.A., Povak, N.A. 2020. Landscape Evaluations and Prescriptions for Post-Fire Landscapes. Final report to the Joint Fire Science Program project ID 16-1-05-24.
8. Chamberlain, C., **Kane, V.R.** 2020. Ellsworth Creek Preserve – Lidar-based Forest Structure Analysis. Final report the The Nature Conservancy of Washington state.
7. Jeronimo, S.M.A., Bartl-Geller, B.N., Griffey, V., van Wagtendonk, L., Shaw, M., **Kane, V.R.** 2019 Using lidar data to develop silvicultural restoration options and identify potential American marten habitat. Final report to the USDA Forest Service: Malheur National Forest and Wallowa-Whitman National Forest. Agreement 18-CO-11060400-16.
6. Collins, B.M., Lydersen, J.M., **Kane, V.R.,** Povak, N.A., Brooks, M.L., Smith, D.F. 2018. Effects of fuels management on fire intensity, rate of spread, severity, and resultant forest structure within the 2013 Rim Rire landscape. Final report to the Joint Fire Science Program. Project ID 14-1-01-23.
5. Blomdahl, E.M., Thompson, C.M., Kane, J.T., **Kane, V.R.,** Churchill, D., Moskal, L.M., Lutz, J.A. 2018. Forest structure predictive of fisher (*Pekania pennanti*) dens exists in recently burned forest in Yosemite, California. Final Report to the National Park Service. Project USURM-120.
4. Kane, J.T., **Kane, V.R.,** Lutz, J., Churchill, D., Moskal, L.M. 2018. Determining if managed wildfires and prescribed fires conserve critical habitat structure for Pacific fishers in the southern Sierra Nevada. Final report submitted to the National Park Service. Task agreement P14AC01558.
3. LeFevre, M., **Kane, V.R.** 2017. Using LiDAR to Assess Forest Structure and Fuels at Oregon Cave National Monument and Preserve and at Whiskeytown National Recreation Area. Final report submitted to the National Park Service. (Task agreement P15AC01626).
2. Jeronimo, S.M.A., Dow, L.R., **Kane, V.R.,** Churchill, D.J., Franklin, J.F. 2017. Using LiDAR to inform silvicultural restoration in the Crater Lake Panhandle. Final report submitted to the National Park Service. (PNW Cooperative Agreement H8W07110001).
1. **Kane, V.R.,** Kane, J.T., Lutz, J.A., Franklin, J. 2016. Integrated, observation-based carbon monitoring for wooded ecosystems in Washington, Oregon, and California: Results of LiDAR-based mapping of biomass. Final report submitted to Robert Kennedy, PI for NASA/USDA Carbon Monitoring System

project, Integrated, observation-based carbon monitoring for wooded ecosystems in Washington, Oregon, and California (USDA 2011-67003-20458).

Invited Talks and Presentations

Kane, V.R. December 2021. High-resolution sensing of vegetation and fuel structure from terrestrial, airborne and spaceborne platforms. 9th International Fire Ecology and Management Conference. Association for Fire Ecology.

Kane, V.R., Kane, J.T., Larson, A., Churchill, D.J., Povak, N.A., Cansler, C.A., November 2019. Integrating the work of wildfires into landscape restoration: Post-fire landscape evaluations. 8th International Fire Ecology and Management Conference. Association for Fire Ecology.

Kane, V.R., Prichard, S. June 2019. An evaluation of landscape-scale fire-induced change in Washington state, USA. Forest fire severity patterns and trends: implications for ecosystem trajectories in North America symposium at the 12th North American Forest Ecology Workshop.

Kane, V.R., Kane, J.T., Larson, A., Churchill, D.J., Povak, N.A., Cansler, C.A., April 2019. Are wildfires recreating fire resilient forest structures at landscape-scales in northeastern Washington state? US Regional Association of the International Association for Landscape Ecology Annual Conference.

Kane, V.R. Emerging trends in lidar analysis. 2018. Bureau of Land Management Remote Sensing Update Meeting.

Kane, V.R. Precision Forestry Cooperative lidar projects. 2018. USDA Forest Service Pacific Northwest Research Station Operational Lidar Inventory conference.

Kane, V.R. Predicting Burn Severity Patterns in Yosemite National Park and the Douglas Complex Fires in Oregon. 2017. USDA Forest Service Rocky Mountain Research Station Missoula Fire Sciences Laboratory Seminar Series.

Kane, V.R. LiDAR for habitat assessment. 2017. Western Oregon BLM Silviculture and Wildlife Joint Working Groups Meeting

Kane, V.R. Using airborne LiDAR to identify characteristics of forest structure selected for by California spotted owls across multiple scales. 2016. Natural Areas Conference.

Kane, V.R. Airborne LiDAR for forest ecology, inventory, and monitoring. 2016. Washington State Department of Natural Resources.

Additional First Author Presentations at National Conferences

Kane, V.R., Cansler, C.A., Kane, J.T., Bartl-Geller, B, Povak, N.A., Lutz, J.A., Churchill, D., Hessburg, P.F., Larson, A. 2020. Burn severity, repeat fires, and forest management interact to influence forest structure in northeastern Washington, USA. Ecological Society of America 2020 Annual Conference.

Kane, V.R., Blomdahl, E.M., Lutz, J.A., Kane, J.T., Asner, G. 2018 Fisher & spotted owl habitat from airborne lidar data. 2018 Sequoia-Kings Canyon Science Symposium.

Kane, V.R., Kane, J.T., Strunk, J., Gould, P., Maki, C., Churchill, D., Moskal, L.M. 2018. Photogrammetrically derived forest canopy data to assess and monitor forests across states. ForestSat 2018.

Kane, V.R., Povak, N.A., Kane, J.T., Collins, B. 2018. Local biophysical patterns interacting with fire weather best explain burn severity patterns in the central Sierra Nevada, California. Association for Fire Ecology and International Association of Wildland Fire Fire Continuum Conference.

Kane, V.R., North, M., Kane, J.T., Churchill, D., Asner, A. 2017. Airborne lidar reveals key characteristics of habitat used by California spotted owls across four large study areas. Silvilaser 2017.

Kane, V.R., North, M.P, Kane, J.T., Churchill, D., Asner, G.P. 2017. California spotted owls select nesting and foraging sites based on tall tree densities. Ecological Society of America Annual Conference.

Kane, V.R., McGaughey, R.J., Asner, G.P., Kane, J.T., Churchill, D., Vaughn, N. 2016. Mapping forest structure from tree clump and opening patterns across landscapes with airborne lidar to study response to disturbances and map habitat. American Geophysical Union Fall Conference.

Workshops, External Outreach

Southern Sierra All-lands Restoration and Recovery Program: Lidar Workshop #2 – Case Studies. May 2022. Virtual workshop delivered to forest managers, federal, state, and local agency managers, and stakeholders in the southern Sierra Nevada, USA.[1]

Forest and Shrubland LiDAR Derived Products Outreach Session. February 2022. Virtual seminar to state of California policy makers and managers on applications of airborne lidar data to natural resource management.

2020 Creek Fire Research Update. February 2022. Virtual workshop delivered to USDA Forest Service managers and scientists and state and local policy makers and managers on plans and status of the multi-agency studies to understand the drivers and consequences of the 2020 Creek Fire.

Southern Sierra All-lands Restoration and Recovery Program: Lidar Workshop #1. February 2022. Virtual workshop delivered to forest managers, federal, state, and local agency managers, and stakeholders in the southern Sierra Nevada, USA.[8]

ArcGIS Online and Accessing Lidar Data. January 2022. Virtual workshop delivered to forest managers, federal, state, and local agency managers, and stakeholders in the southern Sierra Nevada, USA. [8]

Accelerating the Development of Structural Complexity at Ellsworth Creek Preserve. January 2022. Virtual workshop with The Nature Conservancy of Washington through the Forest Stewards Guild to a national-wide audience of forest managers.

Lidar tools for forest restoration planning. September 2021. Virtual workshop and field trip for Forest Service and The Nature Conservancy forest managers and ecologists.

Workshop on forest metrics from preliminary lidar delivery for the Southern Sierra All-lands Restoration and Recovery collaboration. April 2021. Virtual workshop given to federal, state, and local stakeholders.

Workshop on the use of airborne lidar data for forest management and restoration October 2021. Virtual workshop delivered to the Dinkey Collaborative Forest Landscape Restoration Program stakeholders.

Workshop on the use of airborne lidar data for forest management and restoration September 2021. Virtual workshop delivered to forest managers for the Bass Lake Ranger District, Sierra National Forest.

Assessing the Work of Wildfires and Identifying Post-fire Management Needs. October 2020. A webinar to share the results of the Landscape Evaluations and Prescriptions for Post-Fire Landscapes Joint Fire Science Program Project (ID 16-1-05-24) with forest managers and stakeholders.

DRAM Webinar: SNC and UW Presentation on Lidar-based Forest Analysis Tools. June 2020. Virtual seminar given to forest policy makers, managers, and scientists primarily from California.

Assessing the Work of Wildfires. March 2019. A workshop to share the results of the Landscape Evaluations and Prescriptions for Post-Fire Landscapes Joint Fire Science Program Project (ID 16-1-05-24) with forest managers and stakeholders.

Airborne lidar based tools for landscape evaluation and restoration project planning. 2019. Two-day workshop delivered to Malheur National Forest managers, Oregon.

Airborne Lidar for assessing and managing forests. 2018. One day workshop delivered to Malheur National Forest managers, Oregon.

Airborne LiDAR for forest inventory. 2016. Two-day workshop delivered to Idaho Department of Lands.

[1] Recording of workshop available at:
https://drive.google.com/drive/u/1/folders/1n9VXR7qQ5FgSQzxya9YLsICGNVMX2wEG

Employment History

University of Washington

Research Assistant Professor, June 2016-present, School of Environmental and Forest Sciences, University of Washington

Research Associate, 2010-2016, School of Environmental and Forest Sciences, University of Washington, JF Franklin supervisor.

Intel Corporation (October 1983 – April 2001, Santa Clara, CA and Hillsboro, OR)

Server Chipset Division Director of Strategic Planning (1999-2001).
Workstation Processor/Chipset Planning and Marketing Manager (1997-1999)
Corporate-wide Microprocessor Strategic Planning Director (1996-1997)
Mobile Modules Operation Marketing (1995-1996)
Pentium Pro Processor Product Manager (1990-1995)
Real-time Operating System Product Manager (1986-1990)
Customer Support Planning (1985-1986).
Customer Support Engineer (1984-1985).
Manager Technical Writing Group (1983-1984)

Technical Writing (September 1977-September 1983)

Altos Computer Systems, San Jose, CA; Lead technical writer (10/82-10/83)
Cromemco, Inc., Mt. View, CA; Technical writer (8/81-10/82)
Varian Associates, Palo Alto, CA; Lead technical writer (2/80-7/81)
Control Data Corp., Sunnyvale, CA; Technical writer (6/79-2/80)
Sperry Univac, Blue Bell, PA; Technical writer (9/77-6/79)